

MENTAL SUGGESTION IN THE THEATRE—In This Number

THE
PROGRESS
MAGAZINE

OCTOBER

1909

TEN CENTS





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THE PROGRESS MAGAZINE

CHRISTIAN D. LARSON, Editor

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Instruction by Correspondence

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THE greatest service that any institution can render to man is to teach him how to help himself to become more and accomplish more—to use effectually all the faculties and powers in his possession in moving steadily and surely toward the highest goal he may have in view. Or, in other words, to give each individual that understanding of his whole nature that will enable him to use all that is in him, and make that all count in everything he may undertake to do. It is in that manner that he may promote progress, advancement, improvement, growth, development, attainment, achievement and success in his own life and thus gain the privilege to live a life that is thoroughly worth while.

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To secure an education that actually does educate, in the real sense of the term, is one of the greatest problems among ambitious, enterprising people to-day.

Modern academic methods are not always practical; while they may enable a person to know, they do not always enable him to do. The object of education is not simply to give us information, it must also enable us to use that information to better advantage. No process of education can educate satisfactorily and keep the individual "up in front" unless that process can be applied all through life at any and all times.

True education, in its broadest sense, is nothing but right living. A person may go to all the high schools, academies and colleges in the country, but if he has not learned right living he is not educated in the fullest sense of the word.

We must continue in school as long as we live

if we are to live right and make the most of the powers we possess. There can be no end to a true education. A true education once begun cannot cease as long as there is life, any more than thought can cease so long as there is life.

Some education simply polishes the surface; it does not draw out into the world of practical action those greater possibilities of ability, talent and genius that are latent within us; it does not tap the great reservoir of the ordinary mental field; it does not explore the vast mines of true richness and superior wealth that lie beneath the surface it may have polished so well. But once given the opportunity of right thinking and right living, all these things will be opened up to us for use.

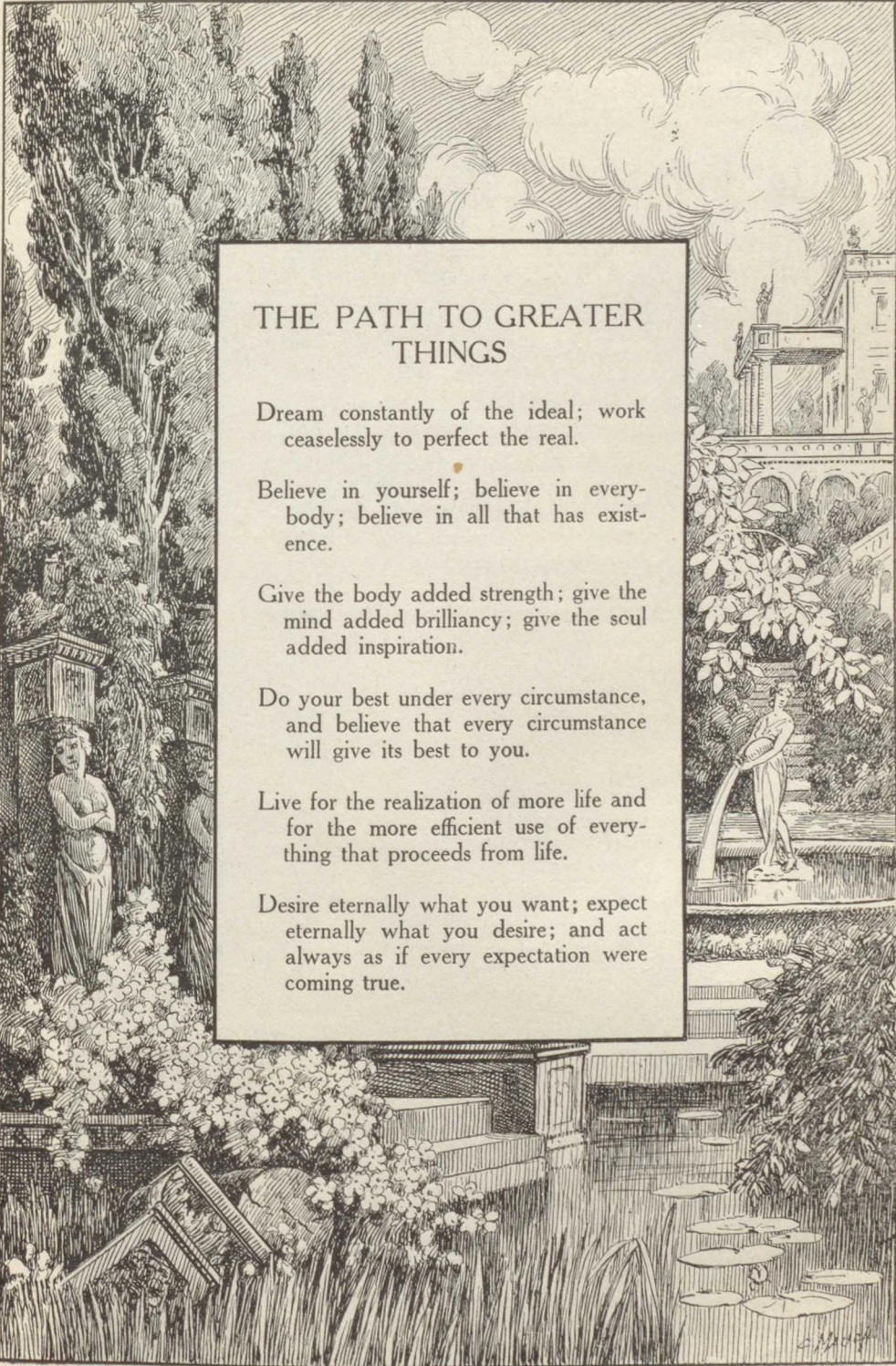
Education

by Mail

There are many ways through which the individual may educate himself all through life, but most of these ways are indirect, and produce superficial results only. Few people can undertake to educate themselves without misdirecting time, energy and attention on every hand. Expert direction is needed if every moment is to be turned to good account. Until recently the majority have believed that to secure such direction and guidance, the student must go to the teacher and be taught personally; but no person who understands the correspondence method of instruction believes this any more. Students can be taught and taught most successfully all over the world without leaving their homes and without losing a single hour from their work.

That the correspondence school is a success; that it has come to stay and that it will play a most important part in the advancement of great masses of people, is not only proved by what has already been done through such methods, but also by the fact that correspondence methods of instruction are indorsed by the leading educators of this country. The late President William R. Harper of the University of Chicago was an earnest advocate of correspondence instruction. And the same is true of Dr. Charles N. Elliott, recently president of Harvard, President Nicholas Murray Butler of Columbia University, Dr. F. W. Gunsaulus, president of Armour Institute, as well as many others.

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THE PATH TO GREATER THINGS

Dream constantly of the ideal; work ceaselessly to perfect the real.

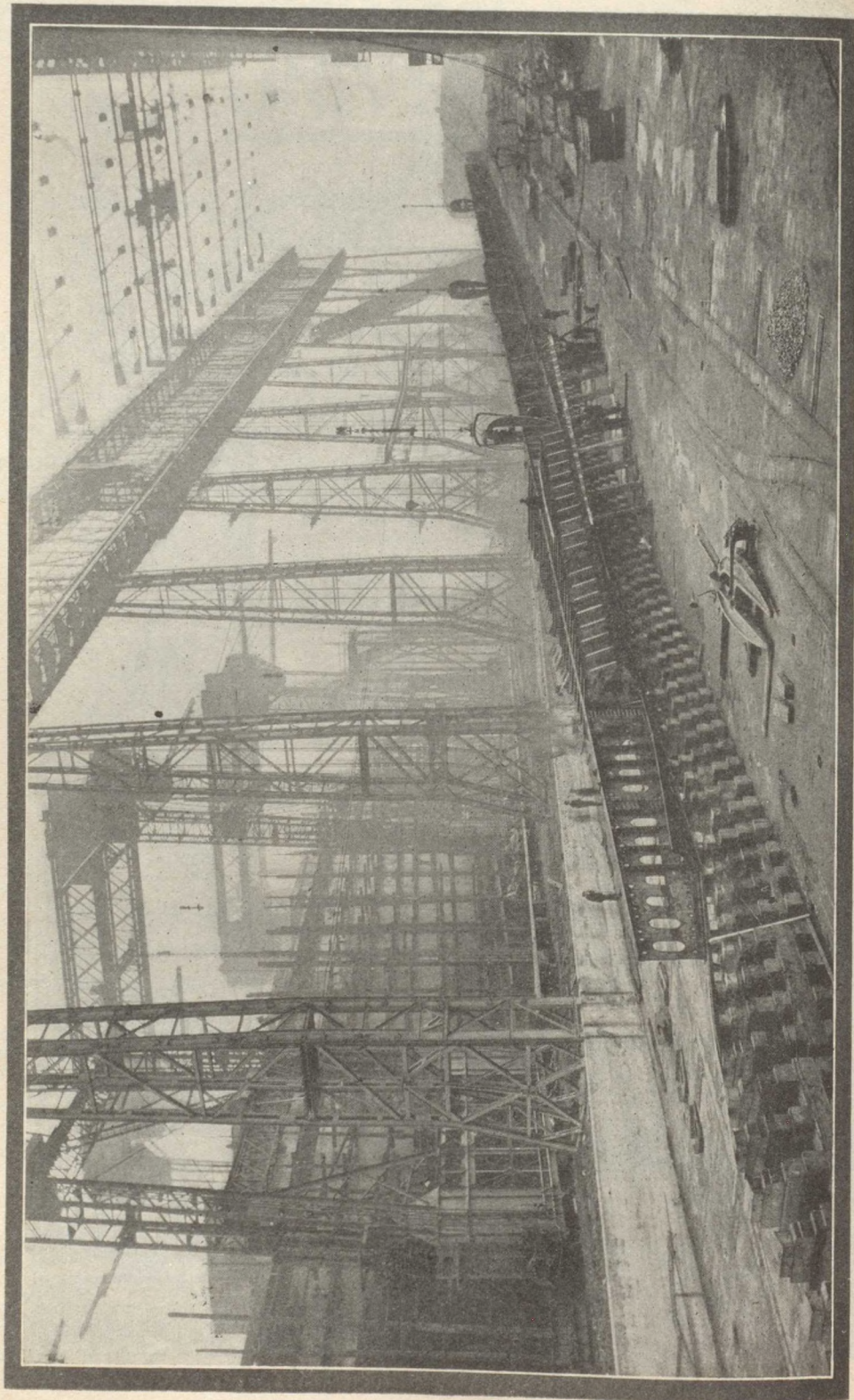
Believe in yourself; believe in everybody; believe in all that has existence.

Give the body added strength; give the mind added brilliancy; give the soul added inspiration.

Do your best under every circumstance, and believe that every circumstance will give its best to you.

Live for the realization of more life and for the more efficient use of everything that proceeds from life.

Desire eternally what you want; expect eternally what you desire; and act always as if every expectation were coming true.



BELFAST, IRELAND—SHIPYARDS

Showing the great steel keel of the proposed liner, "Olympic"

See article on "Evolution of the Steamship," page 19



THE PROGRESS MAGAZINE

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No. 8

EDITORIAL



COMBINE sympathy with strength and you have the true foundation for greatness. It is sympathy that places the mind in touch with the larger domains of life, and it is strength that gives tangible expression to the up-building forces and elements that those domains might contain.

NOTHING is gained through brooding in jealousy or despair over the greater success of others, though ages of time and oceans of energy are wasted in this very thing. Instead of deploring the fact that others are gaining ground faster than you are, give all your time and attention to the increase of your own working capacity and the legitimate promotion of your own advancement.

YOU cannot further your own interest and welfare by trying to hold others back so they will not get ahead of yourself. When others are moving faster than you are, it is "up to you" to move faster still, if you wish to continue in the lead. The man who tries to retard the progress of the whole procession in order to prevent the rest from passing on ahead of his own slowly moving caravan, is a very small man, indeed.

THE man who sacrifices himself for the good of others is doing very little to promote the good of anyone. And the reason is simple. The idea of sacrifice is not, as many suppose, to give away something that you may deeply desire, but

that you do not necessarily require. To give from the riches of your life or from the over-abundance of your possessions is not sacrifice; it is simply expression, or what may be termed a "wise investment;" and you will finally reap the benefit in every instance. But when you deprive yourself of something that you absolutely need to keep your own system in normal condition, then you make a sacrifice. This, however, no one can afford to do. Reduce your own strength and you reduce your own usefulness.

WHEN the average person comes to a dark place he turns down his own mental light; that is, he becomes discouraged, begins to worry and is tempted to expect the worst. But it is on such occasions that we need all the mental light we can secure; therefore, when we meet the darkness of adversity or threatening failure, this light should be turned up at once, as far as it will go. In other words, when everything is dark about you, make your own mental world as bright as you can. Fill your mind brimful of cheerfulness, faith, self-confidence, positive optimism and determination. You will thus be in the light instead of in the dark, and you will clearly see your way through.

TRUE power and real superiority are always recognized, never envied, never ignored. The man who is able, competent and strong need never seek the most lofty position; the most lofty position will invariably seek him, and will give him no peace until he complies. The man who tries to push himself forward and

tries to force himself into positions that he is incompetent to fill, may find many disappointments and rebuffs in life, and the majority among the ambitious are more or less connected with this class. But the man who gives his first attention to the building up of his own strength will steadily move to the front by virtue of the constant increase of that strength. He will not have to compel the world to give him recognition; the world needs his service, and the world knows his value, even though he may live in a wilderness. Let him continue to become such, and he will be wanted where he can do much.

DO you notice minutely the trivial actions of people about you? When a man takes his handkerchief out of his pocket and proceeds to remove the perspiration from his face, do your eyes follow the proceeding from start to finish? Or, when anybody does anything similar of a personal nature, something that is wholly unimportant to you, do you give every detail your closest attention? The majority have this habit to some degree, and that is one reason why their minds are small. It is well to be observing, but when you have full control of your observations you notice only those things that are vital to you, and you do not permit your attention to follow, unguided or unconsciously, every line of action that may present itself to view. The mind that is to grow must not misplace attention. The mind that aims to become great must not waste time and thought in the satisfying of mere idle curiosity. The great mind is never morbidly curious. The great mind never "takes notice" of the purely personal actions of others. The great mind is concerned with those things only that make for greater things, even though they be wholly insignificant now; and he controls his attentions accordingly.

THE finer and more tender feelings in life invariably add to the richness and worth of every factor in human existence. The mind that is large becomes larger still, when the heart is large. And the man who is great becomes greater by far if he is also kind. But the greater part of the kindness and tenderness of

the world is misapplied. It does not touch the right spot in the soul of man. Too frequently it adds fuel to the fires of evil instead of adding strength and beauty to the good. In fact, too much of it is closely akin to the sentimentality of the woman who felt sorry for the trees because they had to stay out all winter in the cold.

A marked illustration of misapplied kindness was recently brought to my notice. A certain large-hearted woman had a most delightful apartment in the most desirable part of the city. The air was pure; the atmosphere was cool all through the summer months, and the surrounding scenery was most beautiful. But this woman would be absent all through the warmest months. She thought someone ought to enjoy her comfortable abode while she was away. And she thought of two friends—invalids—who were shut in somewhere down in the smoke and heat of the city. These friends might regain their health if they could spend the summer in her rooms, and she decided to invite them. But there were two things she almost forgot. There were nearly a hundred families in the building where she lived; and the two friends were suffering from a disease that nearly everybody is afraid of. By inviting these friends she would be kind to two people, but she would be unkind to nearly five hundred. Where did the path of duty lie? What would be considered kindness under such a circumstance?

THERE are several schools of thought at the present time that persist in affirming the idea that "all is mind." And to give special emphasis to this belief they find it necessary to deny the existence of the physical body. But it is a fact, not generally known, that to deny the existence of the body is to shorten the life of the body. The person who continues to deny the body will not live nearly as long as he would if he employed a system of wholesome living and thinking that affirmed the reality of the body. The reason why is so evident that it becomes perfectly clear to practically everybody the very moment it is presented.

WHEN we employ a certain premise as the basis of our reasoning, it is quite easy to come to the conclusion that mind is the only reality. But is that particular premise sound? Thus far no one has ever been able to prove that it is; besides, if such a proof were forthcoming, it could be conveyed from one mind to another only through the medium of the physical senses; and physical senses declare that the physical body does exist. Therefore, if the evidence of the senses were a delusion, or a fact, in the one case, how do we know that it would not be the same in the other case? If it is written on a certain page that physical substance is unreal, that very page is unreal and what is written thereon can mean nothing whatever. But to discuss the subject is useless. Whether the body exists as a reality, as an expression of reality, as a reflection of mental substance, as a manifestation of invisible essence, or however it may exist, it does exist to us in a certain way at the present time; and that particular existence of the body is necessary to our tangible existence in this world. The problem, then, is not how to deny away the existence of the body, but how to so use it that it may serve us now in the best possible manner.

TO persistently deny the existence of the body and to make it a practice to constantly affirm the idea that all is mind, is to form a mental habit that is very undesirable. The mind, through this habit, becomes self-centered; that is, attention is concentrated almost entirely upon the mental field, and therefore the larger part of the energy of the system will be drawn into the mental field. Accordingly, the body is robbed of some of its vitality almost every moment, and for that reason cannot possibly last so long. The extra energy that is drawn into the mind through this habit is not always turned to good account; in fact, most of it is wasted, because there are few minds that are so trained that they can employ constructively all the energy that the system may generate. But minds that are so trained also train themselves to increase their power to generate energy so that one part of the system will not have

to be robbed in order to supply some other part.

WHEN the body and the mind are habitually looked upon as the two necessary factors in the one personality, the energy generated in that personality will naturally be distributed throughout both factors. The body will have its full supply of vitality, and the mind will have all the energy that it may require. Consciousness will not live in some remote metaphysical corner of the mind, and draw most of the life-force of the system into that corner to be wasted, but you will consciously *live* through and through every part of the entire personality, physical and mental. Then, if your living is wholesome and your thinking is in accord with the laws of health, growth and harmony, all the forces and elements of your system will be turned to good account. And that you should secure the greatest good in life under such circumstances, is most evident.

RIGHT thinking and right physical living must go hand in hand. The vitality of the body must be maintained, and every action of the mind should tend to increase the life and the power of the entire system. But those actions of the mind that ignore the body, or that deny the existence of the body, tend to draw vitality away from the body, and therefore prevent the body from maintaining existence as long as it might. People who live almost wholly in the metaphysical usually look spirituelle; but this does not indicate spirituality; it simply indicates that there is a lack of good red blood in their systems. Their bodies are weakened to a degree, and though they may, through the dominance of their minds, be able to "nip in the bud" every disease that threatens to appear, still they never enjoy sound, rigorous health; and they will neither accomplish very much in life nor live a very long life. To this rule there may seem to be some exceptions, but those exceptions are easily accounted for when one becomes familiar with each particular case. The proper course to pursue is to give the best of attention both to the body and to the mind; and to live prop-

erly in every fiber and cell, and to be *alive* in every atom. Thus sickness will be avoided, the greatest achievements will become possible, and you will enjoy a long and happy existence upon earth.

NEARLY twelve years ago an event took place in a western city that deserves to go down through the ages. A certain young man found himself in the midst of most distressing circumstances. He was on the verge of losing everything he possessed, some of which he had inherited, and the rest of which he had worked hard for during a period of nearly five years. He had been most faithful to his work; he was competent to an exceptional degree, and he deserved to win the highest success to which he might aspire; but he had met a group of adverse circumstances that he seemed unable to control. He was about to give up in despair, but his young wife saved the day.

THE first thing she told him was this: "When you are about to let go, hold on." He had never heard that before, but the more he thought of it the more he thought he saw in the magic of those words. This was not all, however, that she did to give him encouragement. One evening, as he came home, she saw that the cloud upon his mind was both thick and black, and realizing the vital importance of the situation, the fire of her love and the force of her determination to see her husband succeed arose to a pitch of intensity that she had never known before. It illustrated the fact that it requires great occasions to bring out the best there is in us. Placing her arms about his neck and looking up into his eyes with the most tender affection she had ever felt, she uttered the one sentence that changed everything: "I am going to see him reach the top." That was all she said, and there was nothing remarkable about the statement itself; but it was the way she said it; the tone of her voice, the prophetic ring in her utterance, the power of authority in the glory of her countenance. Her words rang true, and more than that. She felt what she said, and she felt it so intensely that her words set every atom in his soul on fire.

In a moment she saw the great change she expected. The clouds were gone, his face was lit up, and there was a strength coming into evidence that she knew could conquer everything.

THE young man went forth, feeling as if he had been born again. But to "hold on" was easier said than done, and to win the day seemed utterly impossible. However, whenever a moment became particularly dark, he could hear the prophetic ring of that charmed statement, *I am going to see him reach the top*. This seemed to give him new life and more power, and he would persist in holding on even in the face of everything. Those words also brought back to his mind the peculiar ring in his wife's voice when she first uttered them. That ring seemed to come from the fathomless depths of her soul, and when he felt the echo of that ring in his own thoughts, it seemed as if it were backed up with immeasurable power. This gave him more faith in himself, and every time he was about to let go, this faith gave him the power to hold on. And he continued to hold on until every opposing circumstance was changed, and the victory won.

LATER on, as opportunities came to do still greater things, he found greater difficulties in proportion; and several times since his first great victory, he was placed in positions so trying that only a miracle, it seemed, could see him safely through. But in each instance the miracle was wrought by the charmed statement, *I am going to see him reach the top*. When he felt the thrill of those words, and the deep prophetic ring that always followed, all thought of fail disappeared, and all the power that was in him seemed to come forth at once. He thus became greater than every occasion, and victory, in every instance, was assured. To-day that man is known far and wide as one of the most successful men in the world. And he does not hesitate to say that he could not have accomplished one-fourth as much if it had not been for his inspiring wife. But the story of the charmed statement he reserves only for those friends who can

understand. All of us can realize, however, what a power such a statement could have in a man's life; and also the tremendous power there is in words of encouragement when properly spoken at the proper time. We can make all our friends successful if we will. We can even fire

those with ambition who have never felt ambition before. If we *feel* what we say, and feel with all that is in us, others will finally feel the same. The slumbering elements in their minds will awaken, and those elements will also be inspired to say, *I am going to see him reach the top.*



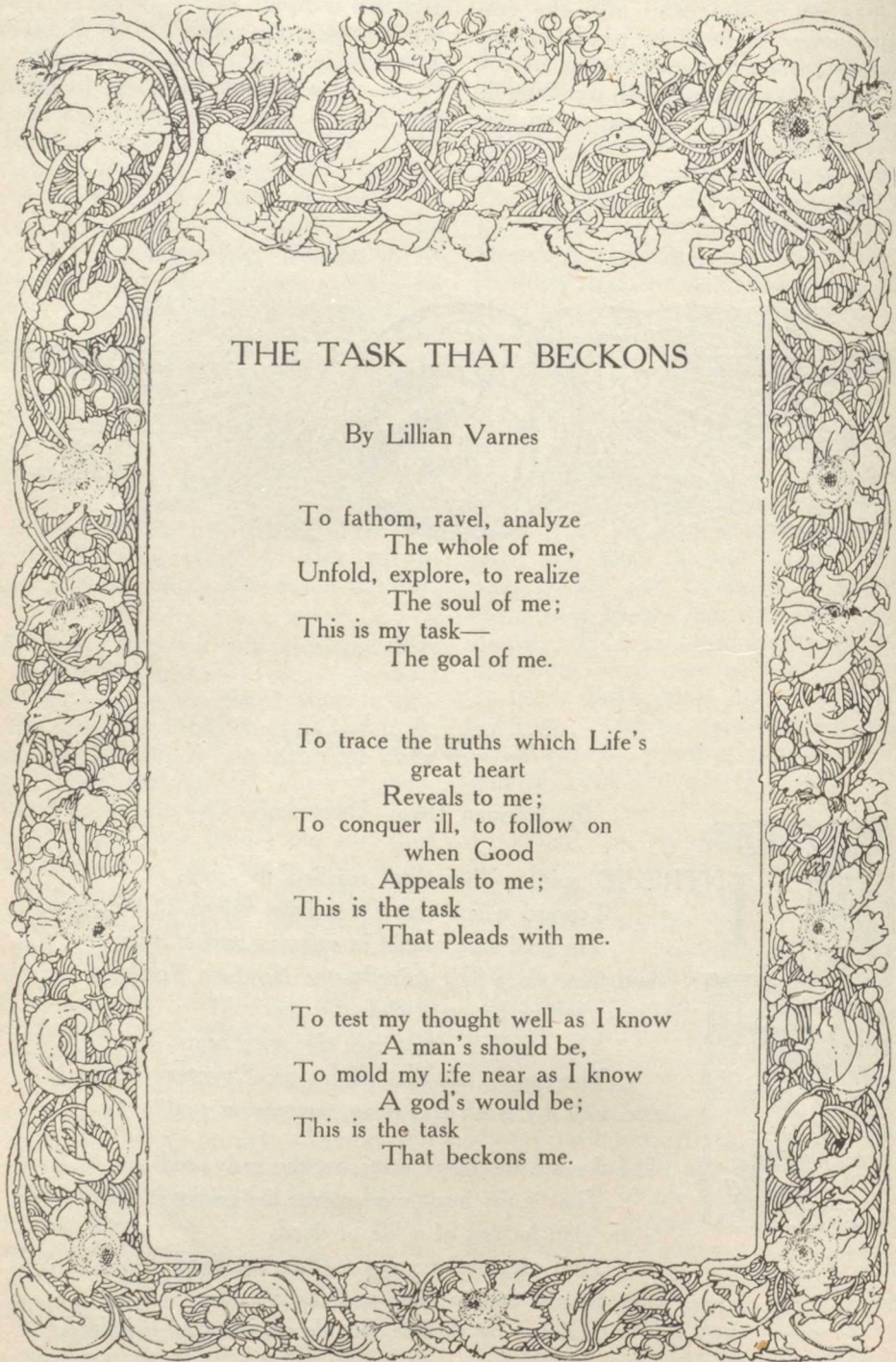
THE DISCOVERER

By Norman Leroy Devendorf



INTREPID spirit. Thou hast reached the goal
 Toward which brave men have striven all the years,
 The goal long sought in suffering and in tears,
 And thou alone hast gained—the Northern Pole!
 Thou shalt be honored while the ages roll!
 The world in silent awe thy story hears,
 The simple tale that earth's great mystery clears;
 Ah, well thy work was done, courageous soul!

The dreams, the plans, were but the early seeds
 That in thy heart were sown; the height attained
 Is the glad harvest of a life of deeds
 And preparation; and to thee remained
 The harvest that to fame and favor leads;
 'Tis not by dreams, but deeds, the goal is gained.



THE TASK THAT BECKONS

By Lillian Varnes

To fathom, ravel, analyze
The whole of me,
Unfold, explore, to realize
The soul of me;
This is my task—
The goal of me.

To trace the truths which Life's
great heart
Reveals to me;
To conquer ill, to follow on
when Good
Appeals to me;
This is the task
That pleads with me.

To test my thought well as I know
A man's should be,
To mold my life near as I know
A god's would be;
This is the task
That beckons me.



Portland and Mount Hood

THE STORY OF PORTLAND

By MATEEL HOWE



I HAVE visited most of the principal cities of the world, both in this continent and Europe and Asia, and I can say honestly and enthusiastically that the city most ideally situ-

ated, most beautifully located of all the cities I have seen is Portland, Ore.

Years and years ago the old pioneer traders and woodsmen built a little village in the heart of the great forests in a tiny cleared space on the banks of the Willamette River and called it Portland. Little by little the forests were cleared and the trees pushed back and little by little other traders and pioneers and teachers and men of means and business came, and slowly but surely the cleared space grew and the trees that had been sole monarchs of this western land so many centuries began to surrender their birthright—the right to live and grow and breathe the great pure air of God's

outdoors untainted. But they have never quite surrendered, these trees, though it has been more than a hundred years since the white men came. Pine and spruce and fir and hemlock, the noblest of all woodland things, they still crowd the city's back doors; and therein lies the charm of Portland.

The valley has been cleared on both sides of the river, and the trees and ferns and little growing things have given way to paved streets and homes and blocks of skyscrapers, and churches, and libraries, and a hundred other structures of brick and stone and mortar. The quiet of the forest has changed to the clang of the street car gongs, the hoot of automobiles and all the million other noises of a busy city. Even back of the heights that surround the valley on the south side of the river the cleared space is growing, and the trees are giving way. But it is slowly and with dignity—they have never quite surrendered. In a decade or two they will be gone, perhaps, but to-day the rem-

nants of a once mighty army is still patiently and heroically fighting the losing fight and holding their positions as best they may on the hilltops and the hill-sides.

It seems to me they must wonder and suffer all day long as the noise and smoke of the city come up to them, but I think sometimes at night, when the noises are hushed and the great city lies still, and a fresh breeze winds its way up the river from the Pacific, and they taste again the salt in the air, fresh and sweet as it was a hundred years ago, they can forget for a time that nearly 300,000 people are sleeping so near them, and dream once more of the forests and life there as it used to be. I live on the heights, within easy walking distance of downtown, and only half a block from the car line, but a climb of ten minutes will take me straight to the midst of the trees and ferns and quiet places, and I can dream in the stillness as I like to think the trees do, and imagine that there is no city and only the woods and things as they used to be; and it is good.

Three years ago, when I first came to Portland, it took me but five minutes to find the woods. Now the places where I used to dream are being cleared for the most wonderful building sites; for they are on the heights and the view is superb, and Portland is growing so fast that I fear I must go still farther in another year. But the beautiful trees! I wonder if they will ever quite give up?

I think that even the builders are sorry, though, to have them go. I think everyone loves the trees. Almost every street in Portland is bordered and shaded by trees of one kind or another. Every yard large enough has one or two of the old monarch trees. Every yard is a mass of bloom. Perhaps the trees themselves have influenced the people. Perhaps it is because the soil is so rich that anything grows riotously that is given half a chance. I know, though, whatever the cause, that the Portlanders seem to love the growing things better than people of other cities, and have earned for their home the title of "Rose City." But it might also be called the city of trees. It is certainly a city that loves outdoor

things and plant life, and flowers and beautiful lawns.

They love the mountains, too, for we have mountains as well as trees. I am constantly hearing people passing on the streets talking about how the mountains looked last evening or the evening before, or of the sunset glow on Mount Hood or Mount St. Helens.

I shall never forget my first view of these mountains. It had been raining and I didn't know Portland had any mountains. Riding on a car the first clear day, at one of the cross streets, I suddenly saw a large, graceful, snow-covered mountain, seemingly not more than a mile away, but instead of being white, it was one great glow of pink. It was so unexpected I gasped, and as the car moved on I thought I must be dreaming. But at the next corner I saw it again, so I got off and stood there fully ten minutes, and looked and looked till the glow had faded. It seemed quite like a glimpse at some fairy mountain. Up in our neighborhood it used to seem a strange thing to have our neighbors call us up over the phone to tell us to look out at the mountain quickly. Now we, too, telephone to them. I think this love of scenery and of things beautiful and God-made is a good thing and helps us.

Portland has four superb snow-clad mountains always in view, even from downtown, in good weather, and a fifth can be seen from certain vantage points. The city is built on both sides of the river, which winds about, as rivers do, running north for a while and then turning and going west through the rest of the city. It is not a muddy, sandy stream, like the Missouri, but clear and deep—so deep that the largest seagoing vessels anchor at Portland's docks. It has no swift or shifting current that makes boating or canoeing unsafe. In the summer time the river is alive with rowboats, canoes, launches and sailboats, and a mile or two up the river you will find another stretch of a mile or more occupied by the gayest of houseboats, where many of the society folk who stay in town in the summer spend their time. Summer and winter the river is always busy with river boats that ply up and

down the Willamette and Columbia daily, and one can always find a dozen or two dozen ocean steamers or schooners tied up at the various docks loading or unloading—for we have the largest lumber mills and the largest flour mills of the world here on the river banks. The river is always a busy place.

On the north and east sides of the river is what is called the "East Side." The business and wholesale districts, and most

into a very few blocks. Here it spreads over three times as much ground. To put it elegantly, Portland has land to burn.

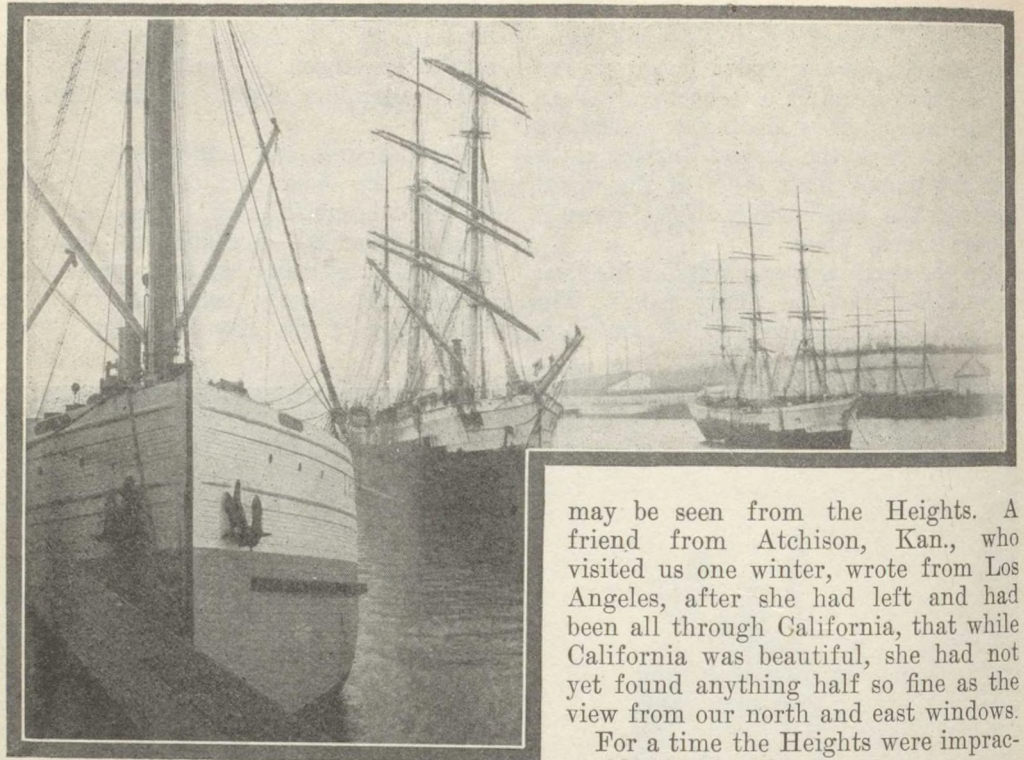
On the west and south sides of the river is the older part of the city—and the most beautiful part. True, all Portland is beautiful—east and west—and the East Side has many handsome homes and several very lovely sections. But the older part of the city is nearly always



Fifth and Morrison Streets, Portland

of the handsome homes of Portland are on the other side. The East Side is made up chiefly of homes—comfortable homes, with wide lawns—and has been built up in very recent years. Unlike Seattle, Portland has any amount of land to grow on, as the East Side stretches out in a rolling upward slope for miles and miles. Seattle is restricted by her hills to a comparatively small space. Already Seattle's mills and factories are being pushed out by high prices of land to Tacoma. One reason that Seattle always looks so busy is that the business district is restricted

more finished. Besides, the West Side has the Heights. Beginning at the south end of the city are a succession of wooded foothills, about 1,000 feet high, that come almost down to the river bank and then back away from the river for a mile or two, forming a little valley, where Portland first started to grow. They close in again at the north of the city. It is on these hills that my trees grow and it is these little hills that form the heights. If I were a word artist like F. Hopkinson Smith I would paint a series of pictures of the gorgeous views that



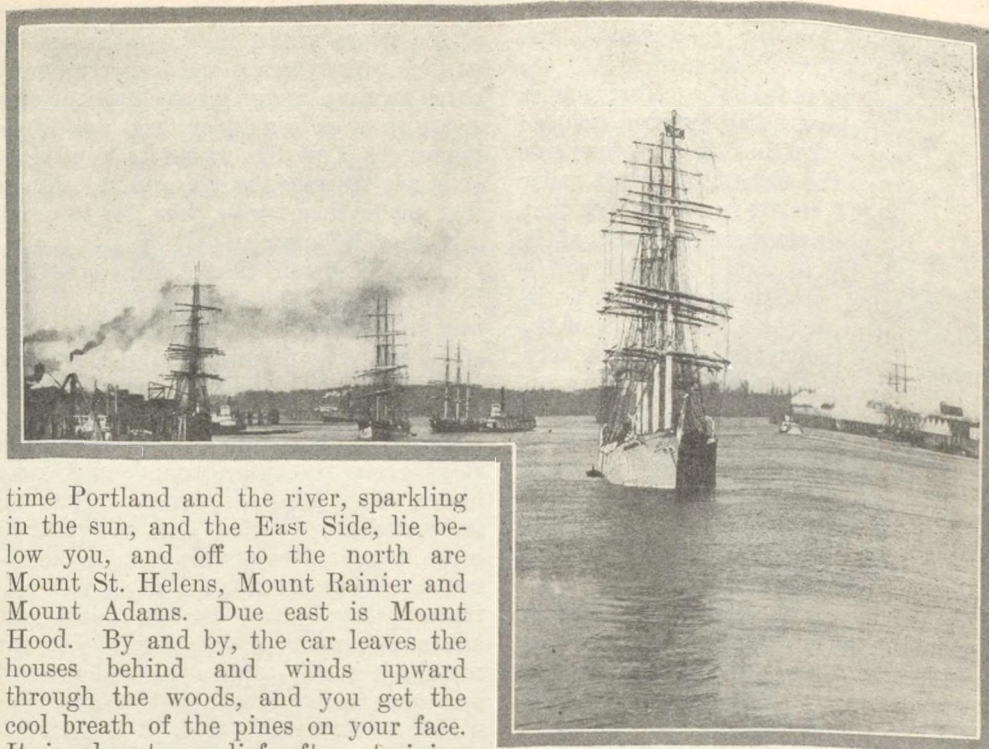
Grain Fleet Waiting in Portland Harbor for Loads



The Poorer Sections Contain a Wealth of Roses

may be seen from the Heights. A friend from Atchison, Kan., who visited us one winter, wrote from Los Angeles, after she had left and had been all through California, that while California was beautiful, she had not yet found anything half so fine as the view from our north and east windows.

For a time the Heights were impracticable for building purposes on account of their inaccessibility. But some years ago a cable line was built up on Portland Heights, and that has been replaced within a few years by an electric line that is unquestionably the finest scenic line in the world—either cable, electric or steam. It begins at Washington street and goes up, up, up and winds around, still going up, through the finest streets and handsomest homes in the city. All the



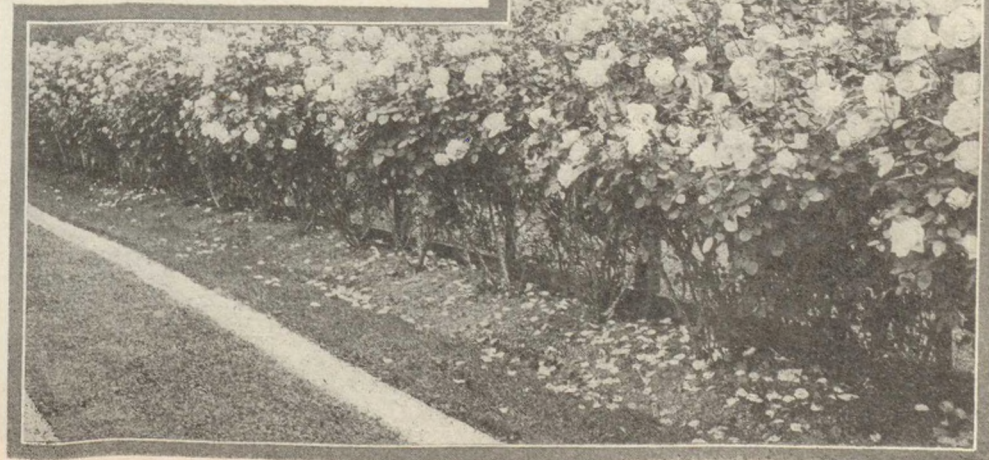
Where Sail Meets Railway, Portland Harbor

time Portland and the river, sparkling in the sun, and the East Side, lie below you, and off to the north are Mount St. Helens, Mount Rainier and Mount Adams. Due east is Mount Hood. By and by, the car leaves the houses behind and winds upward through the woods, and you get the cool breath of the pines on your face. It is almost a relief after straining your eyes to see so much to find just the green woods all about you.

But in a minute, or two, or three, you are out of the timber and the car stops and you get out and walk a few steps and find yourself on Council Crest. You have arrived. Council Crest means so much here I can hardly believe it means nothing to outsiders. There, on top of the highest hill, one can see not only Portland and the Wil-



A Hedge of Portland Roses



lamette River, but even the Columbia and historic old Fort Vancouver. All the snow-capped mountains lie before you in their fullest glory. And, turning, one can see the valley that lies on the other side of the hills—the richest, greenest valley in the world, I believe; even greener than England. It is so beautiful—all of it. And one is apt to forget that the soil is forty feet deep and raises the finest fruits of the Northwest (and that means, of the world), and remember only its beauty. The ride back is much like coming up, only one finds new vistas to admire. I have taken the ride—price, 10 cents—a hundred times, and have never yet grown tired. The ride is probably the prettiest when the roses are in greatest profusion—in May and June—but it is glorious at any time.

One writer said roses were invented in Portland. He was just about right. You haven't seen roses until you have seen Portland roses. Everyone here grows them, and you can see finer specimens in a walk about the city than you can see in any hothouses in Kansas or elsewhere. The soil and climate are peculiarly adapted to rose cultivation. The people love the roses and plant them everywhere. Nearly every walk in the residence district is a walk between two masses of blossoms. They plant roses on both sides

of the street walks, in the yards, in the parks, everywhere, and nearly every porch in town is one great cluster of pink or white or pale gold or deep red climbing roses. One has to see to appreciate. It is not entirely the soil and the climate that make them grow, but the love and care that help nature.

It has been said that it rains every day in Portland. This is not true. It does rain in Portland in the winter time. For about six weeks it rains almost every day. But it does not snow or get very cold, and there are no cold, piercing, marrow-freezing winds to numb one. The grass stays green the year round and roses bloom till Christmas time. After the six weeks' rainy spell it does not rain any more than it does on the eastern coast—not nearly as much as it does in Washington City. And the summers and autumns cannot be surpassed. For five months it hardly rains at all and the days are warm and pleasant, not hot, and the nights are invariably cool. I think Portland got its reputation for rain because of its nearness to Idaho and California, where there are great stretches of country where it never rains at all and every blade of grass or wheat has to be coaxed to grow by artificial means—by irrigation.

Life is so short! Why not spend it in the pleasant spots of the world? And



A Portland Sawmill

Portland is one of the pleasantest spots I have ever seen. It is green, so green all the year round that one thinks of paradise. Its climate is never disagreeable and nearly always agreeable. There are no harsh winds to shrivel up the skin,

or a Hawaiian on the streets every day or two.

To a dreamer like myself it is more than good to sit at the window and watch the masts of the vessels that lie at anchor scarce a mile away. It is good to



Third Street, Portland

as in southern California and inland, and the women here are said to have the finest complexions in the United States.

After one has lived in a seaport city, I do not think they are ever content again to dwell inland. There is a freedom, a charm about it that I cannot explain. From my window, as I write, I can see the masts of the sea-going vessels at anchor. They are loading for Japan, or Calcutta, or Australia, or England, perhaps, and it brings these countries a thousand times nearer, somehow, to have the ships in sight. It makes a city more interesting to have a Japanese and a Chinese quarter, and queer little oriental shops to visit. It broadens one in a way to meet a Hindu or a South American

get the fresh sea breeze each night and morning, and it is good to know that our mightiest ocean is only a few hours away. It is big and it is pretty and it is pleasant. I cannot explain the feeling, but one feels hampered inland. All feel the charm, I think. It is part the charm of the West and part the charm of the sea. It makes life more interesting and broader and more worth while. In spirit I stretch out my arms to the white-winged ships sometimes, and want to go, too, but even though I must stay behind I can follow them in thought and imagination.

Portland, though a seaport town, and a western town, is still a city of homes. It is unlike Seattle and San Francisco in

this and more like an eastern or a southern city. The people do not dine out here evening after evening, but at home. You do not find the grand, mad, breathless rush after pleasure one finds in other coast cities. They lead saner lives here. Men spend more time with their families, or tending their roses, than in most of the western coast cities. People here still find time to be neighborly. Up on the hill in our part of town we send samples of preserves and jellies and chilisauce over to our neighbors and receive the same in return, and run in and out, just as they do in the good, sane, glad places everywhere.

The growth in Portland has been slower than some western cities, but more substantial and sure. It has not boomed, it has just grown. I have been here but three years, but it has changed so much in that time. The people are better dressed on the streets than when I came. There are twice as many automobiles, carriages and horses as when I came. When I go downtown any day I keep thinking it must be Saturday afternoon, the streets are so crowded.

I am just a girl and know little or nothing of the business side of Portland. I write of it only as I see it. I fear I cannot tell of the side men are most interested in. I loathe statistics, and so cannot give them. I only know how the city has grown and improved in a substantial, solid way, because I could not help but see it. I know that Portland has the most wonderful future of any city of the Northwest because of its location and because of the country round it. I took a map and studied it out because I was interested. Anybody can see it who cares to. In the first place, Portland is the farthest inland of any city on the coast that is a seaport. It is the only fresh water harbor on the coast. Down the Willamette eight miles and down the

Columbia 112 miles makes Portland 120 miles inland, and any thinking person can see the advantage that gives Portland in saving of freight. Moreover, and this is the biggest thing of all, Portland has the only downgrade for railroads on the Pacific Coast. Just travel any line into Seattle or California and see the mountains one has to cross. Think, then, of the advantage Portland has in saving freight, you business men. The railroads follow the Columbia River for several hundred miles on a water grade and then the Snake River clear across Idaho and out upon the prairies to the east. And we are 120 miles inland and the largest sea-going vessels visit us. Is it any wonder Portland is the wealthiest city in the Northwest, or that it leads the world as a lumber port and stands first on the Pacific Coast in the exportation of grain? Is it any wonder two new railroads are building into Portland and a third is planned?

True, Portland was slow to wake up. It was settled by New Englanders, and it has always been a conservative city. It hasn't the spirit or boomers Seattle has, but it is waking up, slowly and surely, and once awake it can never go to sleep again.

There are a hundred other things that ought to be mentioned in an article about Portland. It is the most beautiful city in the United States and has the finest water—pure mountain water. I have not spoken of the many opportunities here for men with capital or without capital, for everyone knows that this whole western country, being new, is bristling with opportunities. And as Portland was a little slower to wake up, perhaps there are more opportunities here than elsewhere. It is a land for young men and young women; for men and women of middle and old age. It is a land of opportunities—opportunities for everybody.



THE MODERN PHYSICIAN

By SHELDON LEAVITT, M. D.

Editor's Note.—*The following article will prove of special interest and value. First, because the medical world is on the borderland of great changes; and, second, because the author is in a position to know both sides of the problem; that is, the physical and the mental. Dr. Leavitt has studied orthodox medicine and surgery with some of the best teachers in England, France and Germany, as well as in this country. For many years he practiced these methods with success, and during that time conducted medical and surgical clinics in well-known Chicago colleges. But of recent years he has taken up Psycho-therapy, and has become one of the most prominent exponents of that promising system. What he has to say on the following pages will therefore merit the highest consideration.*



OUT of the ignorance and superstition of the past, medicine, like theology, is fast emerging. Even the last decade marks some important changes. It is altogether unlike what it was when the writer was in medical college, about thirty years ago. Medical colleges with laboratory courses in path-

ology, bacteriology and biology worthy the name were then quite unknown. Drugs were beginning to be discredited, but they had not been displaced by surgical procedure, which was just at the threshold of wide practice and acceptance. Much coarse and reckless work had already been done.

As we see it to-day, medicine presents a fair figure in the world, despite its inadequacies. It is given credit for being far more than it is and of doing far more than it is able to do. Much is ignorantly said about "modern medical skill," as though it were a marvel of efficiency, while the truth remains that it is weak and impotent before the stern countenance of serious disease. Much undeserved praise is accorded modern surgery, which, to be sure, has saved many lives, but which, be it remembered, has, during the same period, sent many people to untimely graves.

The older medicine depended more on drugs derived from vegetable and mineral sources, and was relatively heroic in its doses. Blood-letting passed out of vogue many years ago, but depletion of the system by other methods followed in its wake. Even to-day there is too great a tendency to strike at individual symptoms and to seek their removal despite the setting in which they are found and the intimate associations which they have formed. If the temperature runs high, owing to the energetic resistance offered by the vigilant vital forces, the vigor of the strife is attempted to be quelled by injudicious efforts at temperature reduction. On the other hand, when the system is in a state of low vitality, because of depressing mental states, there is often an attempt made to raise the tone by increasing the nutritive supplies which the system is in no condition to utilize.

The older surgery, owing to its entailment of infection, had not found it advisable to do much visceral invasion, while the brain and its membranes were left pretty much untouched. Appendicitis had not attracted the attention of surgeons in general, and the non-surgical practitioner had not been led to give his ready assent to the cutting procedure now so contagiously common.

It was chiefly the advances in surgery that brought about a neglect of drugs. It was found that certain pains and dis-

comforts could be removed by means of the knife and scissors, and from one ailment to another went the surgical idea until even functional disturbances are now attempted to be remedied in a surgical way. Drugs are still prescribed, though in diminished doses, but largely in a perfunctory manner and for politic reasons. Chemically prepared, so-called synthetic remedies and serums, derived from the blood of repeatedly inoculated animals, are coming into greater vogue. How much humanity is to profit from all this remains to be seen. Concerning serum therapy, it is interesting to note that the antitoxin of rabies, which it was supposed had been doing so noble a preventive work, is now denounced in the house of its friends by some who insist that the disease is more prevalent in those places where the serum has been most freely used.

Another most important change to be noted is the political one. The national associations of the two prominent schools of medicine, namely, "The American Medical Association" and "The American Institute of Homeopathy," together with the several state societies, have become powerful political organizations. It is worthy of notice also that the two schools of medicine, while still in a modified degree antagonistic in matters medical, act in harmony when matters of general professional interest are involved, so that it may truly be said that we have in America a great medical trust which, under the guise of protection of the people, aims to make it impossible for outside methods of cure to find an easy way into practice. Nearly all this has sprung up within the past few years. These facts the writer feels free to state because he has severed his medical society connections, though he still retains his legal standing in the profession.

In passing, he may be permitted to say that the politics which has been systematically indulged by the medical profession during the last few years is wholly excusable from the standpoint of commercialism, which point of view is that usually taken by the physician, despite the popular notion that doctors look at humanity with altruistic sentiments.

The advances of modern medicine have been largely in the direction of recognition of the nature and causes of disease. In any rational scheme involving the relief of humanity from evil oppression, the primary steps would be to learn the character of the ill and the conditions which conspire to propagate it. This is just what medical men have been attempting to do all the centuries, but it would appear that small progress of a definite and reliable sort has been made until recent years. Just how much has even now been substantially done future years alone can disclose. Much confidence attaches itself to the bacteriological theory, and yet there are those of sane minds and scientific attainments who are disposed to look upon bacteria as the consequence, rather than the immediate and efficient cause, of disease. Enthusiasts have carried the theory into almost every pathological channel, giving to fatigue, and even love, microbes of their own. I quote the words of a prominent dissenter, George Granville Bantock, M. D., F. R. C. S. E., who, in a paper presented to the British Gynecological Society, spoke as follows:

"I claim that the poisons of variola, vaccina and syphilis are not and cannot be the product of a bacillus; that the Löffler bacillus is not a constant, and therefore cannot be the essential element for the production of an attack of diphtheria; that the essential element in a case of gonorrhoea is not the gonococcus; that the essential element in a case of typhoid fever is not the bacillus typhosus; that this bacillus cannot live more than a few hours in ordinary sewage; that not a single specimen of this bacillus has ever been discovered in sewer air, and hence typhoid fever cannot be attributed to it, because of its contained germs; that there is no evidence worthy the name that tuberculosis is due to the ravages of the tubercle bacillus; that the comma bacillus cannot be regarded as the essential element in the production of an attack of cholera, and that the same can be said of the plague and its special bacillus; that the so-called pathogenic microorganisms are constantly found under conditions consistent with perfect health,

and that in more than one notable instance they not only appear to, but actually do, exert a beneficent influence. All these things—which are facts, not opinions, capable of demonstration and proof—go to show that the modern doctrine of bacteriology is a gigantic mistake; that we are already at the parting of the ways, and that it is safe to predict that, ere long, it will come to be recognized that these various bacilli play a beneficent role in the economy of nature.”

All these theories have their benefits, and bacteriology, whether so large a factor in the causation of disease as commonly supposed or not, has taught doctors the dangers of uncleanness. Had not microbes been discovered and their relation to disease production been inferred, it is not likely that antiseptic and asepsis would have had their influence upon the professional mind, and their protective values been recognized. There is far less disease to-day than ever before, very largely because strict cleanliness and isolation have been so thoroughly insisted upon. Medicine may be said to have advanced almost wholly along the lines of sanitation. Advances in surgery are likewise due more to asepsis than other features of technique.

With improvements in the methods of staining and otherwise treating microscopic objects, histology, or the study of the tissues of the body, and pathology, or a study of the diseased states, have been advanced. The blood has received special attention, its discs are now counted and its hemoglobin is satisfactorily estimated. The precise value of the facts thus established has not yet been determined, and it is likely never to be, though the most active practitioners are pinning their faith to them.

In the matter of surgical diagnosis, the X-ray has given some advantages over old methods, though it has led to many errors. It may be that too much has been expected from it. The mottling incident to photography has led to wrong conclusions, especially where clinical symptoms have leaned in the direction of the pathology indicated by the picture. But for fractures and dense growths,

especially when not too small or buried too deeply in the trunk of the body, it is an invaluable means of diagnosis.

Along the lines of special practice some improvements of worth are to be noted, but chiefly in the direction of diagnosis. Curative measures for diseases of the eyes, ears, nose, throat, heart, lungs, liver, kidneys, stomach, pancreas, spleen, intestines and the tissues of the body are still lacking. The machine goes to pieces in spite of all that is done. Few cures of organic disease are made by the most expert, and the real difference in results between doctors in the same line of practice is plainly attributable more to personality than to method.

In their research work scientists have confined themselves very closely to material entities. In truth, science does not take into serious thought much that is outside of what appeals directly to the senses, leaving a vast field of reality wholly unexplored. But outside pressure is soon to force upon it—indeed, is already beginning to force upon it—a line of study and investigation which is sure to yield far more satisfactory results.

I have thus far limited myself, in the main, to an impartial statement of what medicine and surgery have done to alleviate human mental and physical ills, and now I may consistently indulge in a recitation of medical shortcomings.

The reader's attention is invited to the following brief statement of the faults and foibles of medicine as it is now taught and practiced:

Medicine is not an exact science.—This is commonly understood and admitted by physicians themselves, though it is popularly supposed that its theories and methods have been established on so secure and perspicuous a basis as to enable the intelligent practitioner to prescribe with much assurance of success. The effective and reliable resources of modern medicine are falsely supposed to be great.

Medicine is materialistic and pessimistic.—This is in great measure due to the fact that it is skilled chiefly in diagnosis and for cure has not looked to non-materialistic sources. The result is that a serious diagnosis inspires an

unfavorable prognosis; how could it do otherwise? True to its convictions, it decries mental and spiritual aid save as it is to be afforded in an incidental and haphazard way.

It vaunts its liberality and its recent advances; but these are already proving to be largely problematical.

The truth is that few unqualified advances have been made by those bearing the degree of M. D. Devoted laboratory workers are only exceptionally trained and experienced physicians.

Serum-therapy, from which so much has been expected, is still too young to tell its own dangers. That it has them can scarcely be questioned.

For example, a recent writer of prominence asserts, as I have already taken occasion to say, that rabies prevails to a larger extent in those places where its antitoxin has been most freely used. Then, too, the ultimate systemic effects of such introduced poisons have not yet been disclosed.

The history of medicine shows that remedies which have been heralded for their alleged virtues when administered by their discoverers have always failed when used by those without faith.

Its largest use of the law of mental suggestion has been to awaken harmful fears in the minds of humanity.

I could recite case after case wherein most pernicious, and, I believe, lethal effects, have thus been needlessly produced by well-meaning, but ignorant physicians. A specialist in kidney diseases, and a man of large intelligence and experience, recently told me that he was perfectly satisfied that many cases of incipient Bright's disease had been given a speedily fatal termination by the brutal character of the physician's diagnosis. How many have gone down under the condemnation of a wrong diagnosis we shall never know, though that a legion have fallen under such a fell influence I do not question. The harrowing fear of disease, propagated by injudicious statements from individual physicians and Boards of Health, has had a bad effect upon many people. Is it not possible for State and Municipal precaution to be successfully practiced without awakening unnecessary fear?

Sedatives, anodynes, hypnotics, cathartics and febrifuges are used far too freely. The same can be said of general and special stimulants and tonics.

I have seen a few patients die from just such drugging, and I have seen many more made most miserable in various ways by the practice.

Orthodox medicine says that psycho-therapy does not avail in other than functional disorders, and implies that therefore it is not to be commended.

After a medical and surgical practice of more than twenty-five years, I affirm that ordinary methods cannot cure as many cases of organic disease as can psycho-therapy, and that they are wholly unable to cope with nervous disorders by the strict use of customary remedies. Approved psycho-therapy makes as free, and as intelligent, use of ordinary hygienic measures as does medicine. They are common property.

Few practitioners have much faith in medicine.

In this respect medicine in the schools and in private practice is like theology in the churches: the confessions of faith to which they professionally subscribe do not represent their true convictions.

Acute diseases are not given much assistance by drugs, and recovery is often greatly hindered by them.

Nearly all acute illnesses do better without, than with, drugs as ordinarily administered, provided the regimen is wisely prescribed and a healthy mental atmosphere is established.

Most of the cures under ordinary methods of treatment are psychic cures, and ought to be so recognized.

One who goes about the study of medical theories and practice with a clear knowledge of psychology speedily arrives at this conclusion.

The ordinary medical practitioner, though he may assert the contrary, has little practical knowledge of the value of psychic means of cure.

I have been again and again astonished at the density of the medical mind with regard to psycho-therapy. It does not know the rudiments of it. Psychological study and its successful practice require a quality of mind exceptionally found

among qualified practitioners. Many among them would excel as veterinarians.

Medical education is elaborate enough in all branches of study save that most important branch of all, namely, the Science and Art of Disease Cure.

The medical schools teach pathology and diagnosis most commendably, but they have relatively little to say regarding curative measures.

Surgery is a department of medicine. Every graduate in medicine is required to study surgery and pass a rigid examination in it, so that every M. D. is both a physician and surgeon. But attendance upon surgical lectures and clinics cannot make a proficient surgeon, no matter what one's ambitions. One must be adapted by temperament and general training to such work, or he will never become reliable, no matter how many patients nor how large his fees.

Accordingly this estimate of modern medicine would be incomplete without a discussion of the surgical side of the subject. Following are some of its defects and errors:

In estimating the value of modern surgery, the vast burden of aggravations, traumatisms, sterilities, melancholias, consecutive disorders of various kinds, and death, to say nothing of money demands, should be weighed up against alleged benefits.

I should be the last to depreciate the value of surgery to humanity. I have been too long a witness of what it has done to alleviate the pains and disabilities which afflict the race to decry its virtues. In this *critique* it is my purpose merely to point out defects and blemishes with a view to their early correction. Surgery has saved many lives, and thereby brought much comfort into many families. Blessings often follow in its train. The trouble is that well-founded enthusiasm is liable to carry one to unwise lengths, and that is what has happened in this very instance.

Surgery often results in aggravations of various kinds. They are especially apt to follow in patients of highly sensitive nervous organizations. Besides, it is not

to be forgotten that there is always a fringe of nervous disorder on the borders of every lesion, so that even when the lesion has been removed, the nervous disorder may persist. When this is true, and especially when an aggravation follows, it is safe to infer that the lesion which has been removed was not the sole cause, or anything more than an accompaniment of the true disorder which was resident in the brain and nervous system. Moreover, we must not forget that nervous disorder is able to simulate true organic disturbance, and thus beguile an operator into unwise action.

I saw a good illustration of this truth in the instance of a physician who called on me for advice not long ago. He related a most interesting story of four abdominal operations done on him by trusted surgeon friends, with a gradual intensification of his bad feelings. He had been advised to submit to a fifth operation, but I told him he would thereby be adding only another folly to those which had gone before. His troubles were of a nervous type, and any good physician of experience ought to have recognized their character. The country is full of similar cases. I meet them at every turn. They haunt the offices of physicians, seeking rest, like birds of evil omen, and finding none.

By "*traumatisms*" I mean scars, adhesions and deformities, which surgeons are sometimes powerless to prevent. To be sure, there are some who are as proud of their surgical scars as are the German student-dualists of those which bespeak the battles they have fought. After abdominal operations, adhesions of a most annoying nature are liable to form, which, in nervous patients, may give rise to no end of trouble. And, even in spite of the most painstaking technique, hernias in the line of incision are apt slowly to develop.

"*Sterilities*" are not so frequent as they used to be. There was a time, dating back not many years ago, when ovaries were removed by the gross. Something of a halt has been called to so conspicuous an abuse, but resections of the same organs are now practiced with far too great freedom. While sterility is

regarded by many women as a boon, those of finer feeling shrink from such mutilation.

"*Melancholia*" is not a very infrequent result of removal of the uterus and ovaries. Lives have been totally wrecked and families have been greatly distressed in consequence. Though mental depression should not go to insane depths, in certain instances, lives may be made utterly wretched. Only a few days ago a woman called on me to relate her woes. Years before she had been a patient of mine for a considerable period and forsook me only because I positively refused to take away her ovaries, to disorders of which organs she wrongly attributed most of her distresses. It was a pitiable sight that of this poor woman, as she sat there rocking with emotion and declaring that her wilfulness had proved her undoing. She was sure that both men and women shunned her—a situation to be borne with better grace had she only been restored to physical health.

Disorders of various kinds are consecutive on surgical operations. We are all so susceptible to mental suggestion and so prone to mis-translate physical sensations that anyone may well hesitate to submit to a serious surgical procedure. The pity is that some patients are apt to attribute to an operation many of the aches and pains in no direct way justly belonging to it. As an offset, however, I have seen those suffering from the direct effects of surgical work who were wholly unaware of the truth.

Then, there is the long roll of the "Dead," which, in our exultation over brilliant successes, we are disposed to forget. This would be a small reproach were surgeons willing to limit their major operations to cases in which life is seriously threatened. But they are not. To the surgeon, as we find him, the presence in the abdomen of any pathological state which does not yield promptly to simple measures is sufficient justification for an abdominal incision. This, again, would not be so serious a matter were all surgeons both prudent and conscientious. The abdomen once open means to too many of them the "doing" of something whether strictly needed or not. When

the mortality from abdominal work sank below five per cent it seems as though all scruples were thrown aside and the abdominal viscera were invaded *ad libitum*, so that now when abdominal symptoms cannot be clearly interpreted the demand is for abdominal section. A mortality of two or three per cent is declared to be scarcely worthy of consideration. But is such an inference justifiable? In reply let us suppose that one out of every hundred passengers on our railroads (not to say three or four, out of a hundred) were to lose their lives every day, no matter what the necessity for travel, what would we all say about it? The question itself is sufficient answer.

Conservative surgery has come to us as a great boon; but has not our enthusiasm over it blinded us to certain serious aspects of the question?

If the law were to require a coroner's inquest over every death consecutive upon surgical procedure of a major type, the bulk of such surgery would be speedily reduced one-half.

The people do not realize the danger of the present situation. Then listen! The surgeon of smallest experience and most meager ability is at liberty to take a deluded patient to the hospital and proceed to cut her up after his own fashion. Who shall say him, Nay? If the patient survive, well and good; if she die, the skill of modern surgery is said to have done for her all it could; her body is laid away in peace, and mourners go about the streets.

I will mention two typical incidents: Two married women were sent to a Chicago surgeon by a certain physician living in a western state, for like operations. They came together, they were operated on on the same day, by the same man, and went home together in caskets. Not very long ago a patient was referred to me by a physician in another state for probable operation. She and her husband called at my office, where I made an examination which disclosed a tumor, lateral to the uterus, about as large as the end of my thumb. It had given no trouble, and, in my opinion, was not

likely to, and had been discovered only by accident. I advised against an operation. After leaving me, friends advised the woman to visit a prominent gynecologist, who said the growth should be removed without delay. There is no doubt that this woman could have lived all her life with small risk of serious trouble from that growth. The growth itself should have been watched, and there would have been plenty of time to give it proper attention had it become necessary. But no, that the risk must be taken at once, was the pronouncement of this surgeon, as it would have been of nine out of ten of all the prominent surgeons. The consequence was that modern surgery did for her all it could, despite which fact she too went home in a casket.

My contention is that if every surgeon knew that every fatal case of this kind would be carefully scrutinized by a coroner's jury, he would exercise greater restraint over his operating propensities than he now does. At present surgery offers too tempting a channel for the accomplishment of malevolent purposes, and there is no doubt that surgeons are putting altogether too many patients to tremendous risk in a most unjustifiable way. The people are unwittingly reposing unwarranted trust in the general medical profession. I know whereof I speak, and it is because I do that this note of warning is sounded.

There is too much surgical juggling with human life, (1) by incompetent and reckless operators, and (2) by competent operators lacking in judgment.

To one capable of appreciating good surgery it is a distress to witness bungling work. I have seen much of both. Good surgery is something requiring mechanical proficiency, and has to be learned very largely through experience. Unfortunately, human bodies with life and hope still in them furnish the chief material upon which the proficiency is to be acquired. No matter how well the theory of an operation is understood by him, nor how much observation he has been favored with, when the young surgeon comes to do the operating with his own hands, he finds himself awkward,

uncertain and distrustful. There are many surgeons in a large practice who, from lack of mechanical ability and deficiency of synthetic mental power, can never become superior surgeons. I have seen patients die on the table as a direct result of ignorant and unskillful cutting.

Surgical skill, which is largely mechanical, is quite another thing from surgical judgment. Surgery of the most approved sort could best be done under the direction of a man of good sense familiar with the possibilities of both medicine and surgery, without the use of his own hands. Young men of mechanical ability could be trained upon the cadaver to do the cutting, ligating, stitching and other work required, and then, operating under the direction of such a man, the very best results could be obtained. Surgery as it is now done is a serious menace to life and health. In a recent letter from a New York surgeon of world-wide reputation, the dangerous situation of the public in its relation to surgical treatment was greatly deplored, though he suggested no safe and certain way out of the situation.

Surgeons, for lack of experience in other than surgical measures, rarely have clear ideas of curative possibilities. For this reason there is altogether too much operating on curable cases.

Though there are many advantages growing out of the division of study and labor connected with latter-day specialization, still there are also many disadvantages. The specialist, knowing relatively little outside his particular line of practice, cannot grasp the possibilities, or even probabilities, lying in other directions. The surgeon is seriously handicapped in this way, and, left to himself, is almost sure to be biased in favor of surgery. For this reason I contend that no serious surgical operation, whether for a fee or not, can justly be performed until the case has been passed upon by physicians of judgment, practicing the most hopeful and helpful methods of cure.

A large prospective fee proves too tempting to many surgeons. Hospital surgeons are drawn to do too much surgical work by the demands for large college clinics.

One who has not been related to hospital service as a clinical instructor is unable to realize how powerful is the pressure brought to bear upon the clinical surgeon. Outside the larger public hospitals the surgeon has to depend mainly upon his friends and assistants to beat the bushes and scare up the game. The occasion for it is found in the fact that a surgeon's popularity, in college and out, depends in large measure on the number and variety of his cases.

Why should general success and large prospective fees be any less alluring to the surgeon than to other men? He is as human as the rest of mankind. It is in doing his kind of service that, at present, he is enabled to provide well for those dependent upon him. Will the time come when competent salaried men will be provided by the government authorities to serve the people without

charge? Until such a utopian plan has been adopted the people will have to safeguard themselves. Then let them do it.

A reduction of fifty per cent in the surgery of women (to put it mildly) and of seventy-five per cent in abdominal work in general, would prove a great blessing to humanity, provided the patients were to receive, instead, treatment of a suitable type.

This statement needs little elaboration. I am fully persuaded that it presents the truth.

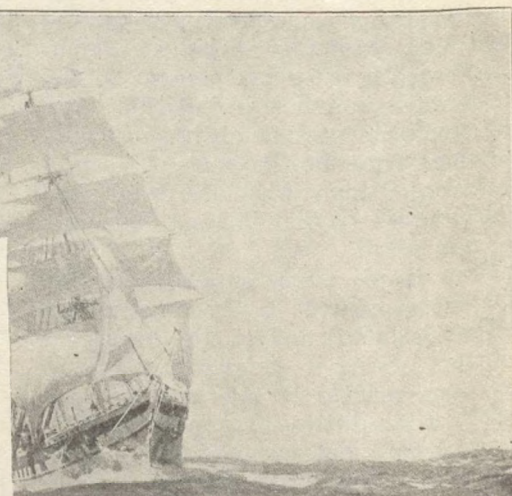
The time has certainly come for calling a halt upon modern methods in both medicine and surgery and for the introduction of needed improvements. What those improvements are cannot yet be fully stated; but the direction in which more industrious search should be made is becoming clear to those who will take time to think and investigate.

MY SHIP


By Jessica Marvin.

I have watched for my ship to come,
From the bourn of a fancied sea,
Bringing a wealth of treasures
And the power of fame to me.
I watched at morn when youth was strength
Aglow with ambition's light,
I watched and waited at even,
When the gray mists dulled my sight.


The star of Love rose o'er my path
With its warmth and illumining glare.
I ceased to wonder and to wait,



For my duty shone most fair.
I had wasted days in waiting,
Till my brain grew tired and dumb.
When lo! my ship had always been in,
It was waiting for me to come.



THE EMPIRE STATE OF THE SOUTH



By JOSEPH T. DERRY

Historian and Statistician of the Georgia Department of Agriculture



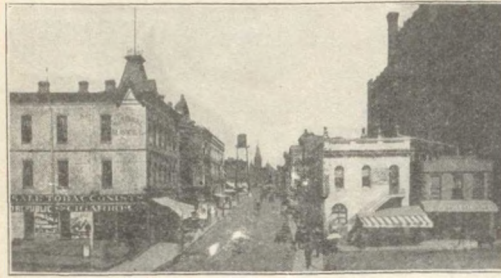
GEORGIA, the youngest of the 'old thirteen," is possessed of a greater variety of soil and climate than any other state in the Union. Of the nine climate belts of the United States, eight are represented in Georgia, the lowest having a *mean annual temperature* of less than 40 degrees, the highest of between 70 and 80 degrees. Georgia's 59,475 square miles of territory embrace 4° 38' 21" of latitude, which would of itself insure variety of climate and productions. But this variety is greatly increased by the topography of the state.

The Blue Ridge Mountains traverse the northern section, which, with its peaks varying from 3,000 to 5,000 feet above sea level and plateaus of less height descending gradually into little hills and level valleys, presents an average elevation of more than 1,000 feet above the level of the sea. Middle Georgia, with elevations of from 180 to 500, and in some instances 1,000 feet, presents a general average of from 300 to 500 feet above sea level. Southern Georgia's lowest elevations are between 50 and 500 feet and its highest about 500 feet above sea level. In its most elevated localities, the climate resembles that of New England, and, as one goes southward, is like that of New York, Pennsylvania, New Jersey, the two Virginias, and so on, to that of Florida. Hence, within the limits of Georgia, can be grown the products of every section of

the Union. The citizens of any part of our country can duplicate in Georgia the crops, the fruits and flowers of their own states.

The *forest timbers* are many and valuable, embracing six varieties of oak, besides poplar, ash, beech, elm, chestnut, hickory, walnut, maple (including the sugar maple), ironwood, sugar-berry, sycamore, sweet-gum, black-gum, dogwood, persimmon, sassafras, wild cherry, red bud, cedar, short leaf and long leaf pine, the last named being the chief original growth in South Georgia, where also are found the cypress, palmetto and titi.

In agriculture Georgia ranks high. The money value of the products of her cotton has averaged for the past five years more than \$100,000,000. In this crop Georgia outranks every state except Texas, and in proportion to area outranks even Texas. Georgia's upland cotton commands the highest market prices, and her sea-islands and most southern counties produce the greater part of the finest cotton known to commerce—the long staple or sea-island. Georgia's corn crop is worth more than \$42,000,000. Oats produce abundantly in every section of the state, as do barley and rye wherever planted. There are excellent wheat lands in northern and middle Georgia. Vegetables of every kind are raised in every part of the state. Buckwheat does well throughout the northern section. All the grasses from which hay is made flourish in Georgia, but clover, alfalfa and timothy do best in the northern and middle parts. Bermuda is at its best in middle and parts of northern and southern Geor-

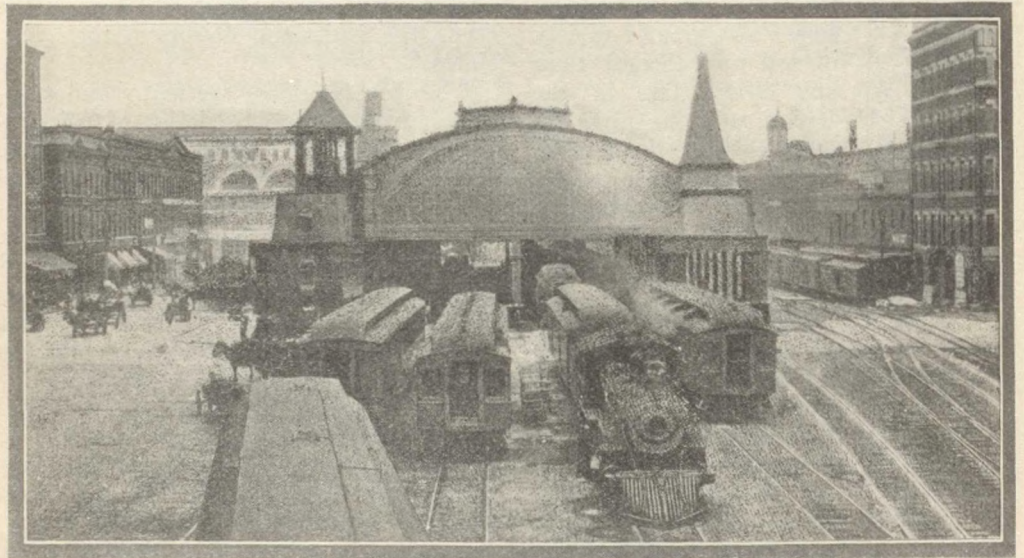


Atlanta, 1887

gia. Crab and crowfoot grasses are especially suited to southern Georgia.

All over middle and southern Georgia is grown the sugar cane, richest in sac-

are abundant and of excellent quality, and are produced in every section of the state. Apples do best in northern Georgia. But the queen of Georgia fruits is the peach. Although the commercial peach orchards did not begin to attain any great proportion until about thirty years ago, yet as far back as the memory of the oldest inhabitant can reach, many varieties of most luscious peaches were found on every plantation in middle Georgia and on many of those of the north and south of Georgia. Their flavor was hardly equaled and certainly not surpassed by the best varieties of to-day.



Union Depot, Atlanta, To-day

charine matter of all the plants from which sugar is extracted, and rice is extensively grown on the coast lands.

One of Georgia's best points is *fruit raising*. The berries of every kind, apples, peaches, pears, cherries and plums

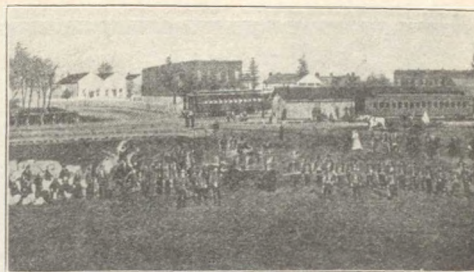


Peachtree Street, Atlanta, 1864

They were raised, too, in sufficient quantities to supply masters and slaves and the demands of the neighboring cities, towns and villages. The slaves on the plantation had their own little patches for raising their vegetables, and most of them had their little homes and a few trees, from which they gathered apples, peaches, pears and plums. In fact, all these fruits were plentiful for home use. A few comparatively large orchards for that day, near Augusta, Ga., and Aiken, S. C., shipped peaches by rail to Charleston or Savannah, and thence by steamer to New York. The peach industry of Georgia began to become an important financial enterprise when, in 1872, Mr.

J. P. Berckmans produced at his Fruitland Nurseries, near Augusta, a peach called the Alexander, and about 1882 Mr. Samuel H. Rumph of Marshallville, after various experiments and careful selection and graftings of seedlings, originated what is known as the Elberta peach, so named in honor of his wife.

From this time commercial orchards sprang up in Georgia on every side, the largest of them being near Fort Valley and Marshallville, among which the Hale orchards at Fort Valley are famous. Then fruit growers in north Georgia planted out trees, and great commercial



Atlanta, 1856—Pryor Street Crossing

organized last fall, the profits of the 1909 crop were about as large as those of the 1908 crop. This shows what can be effected by organization.



Atlanta's Business Section, To-day

orchards were built up at Athens and Cornelia, in northeast Georgia, and at Rome and Marietta, in northwest Georgia, while southward they extended to Americus, where the extensive Ware orchards have gained a national reputation. In the commercial peach orchards of Georgia there are some 15,000,000 trees, while in private orchards in every section of the state are many hundred thousands more. More than 6,000 cars were needed to haul the peach crop of 1908. Unfavorable seasons cut down the crop of 1909 to the extent that only a little more than 2,000 cars were employed in its transportation. Yet, through the wise management of the Peach Growers' Association,

As in the days before the war, so now the farmers have their own private orchards of apple, peach, pear, plum, cherry, fig and pomegranate trees, and near the Florida line they also have crops of oranges, lemons and a few bananas and



Atlanta After Sherman's Raid, 1865

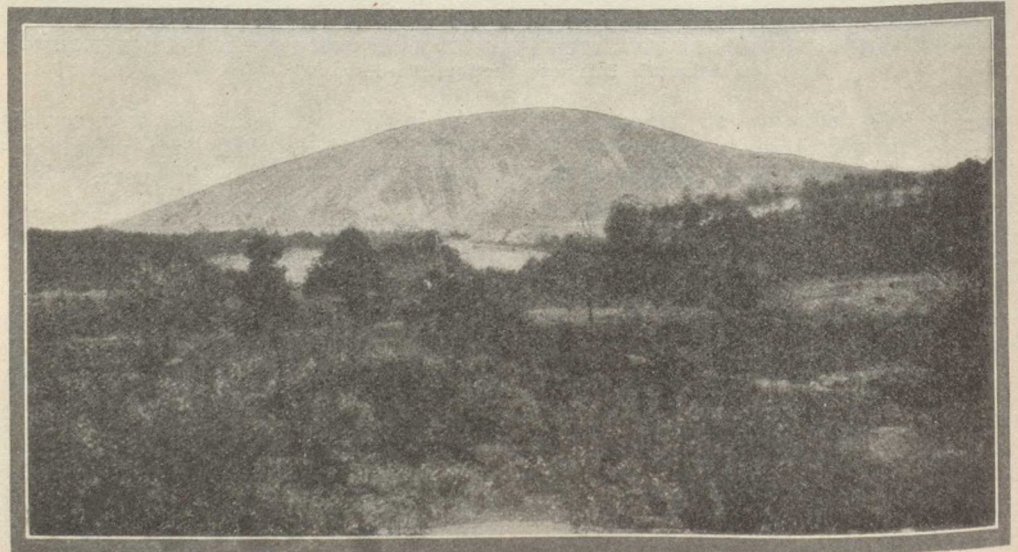


A Section of Savannah

pineapples. Grapes of many varieties are grown all over Georgia, the scuppernong being much in demand for the manufacture of domestic wines. The Georgia watermelon is famous throughout the Union and about 10,000 carloads are shipped annually. In addition many thousands more are being hauled in wagons into towns and cities, where they find ready customers. Cantaloupe culture

is also carried on upon a large scale and many thousand cars and wagons are employed in their transportation.

Of nut trees the black walnut, the hickory, the chestnut and the pecan are the most noted, especially the last named, of which there are already in the state many large commercial groves. The ground pea, or peanut, abounds in almost every section of the state and is a favor-



What Is Said to be the Largest Piece of Solid Rock in the World, Georgia

ite with everybody. Strawberries, blackberries and raspberries are grown in private gardens for home use and in large quantities also for commercial purposes.

In every part of the state wagon roads are being improved, and under the impetus given by lovers of automobile riding, good roads for vehicles of every description will ere many years rival the magnificent system of railroads that cover the state like a vast network.

The beautiful ante-bellum homes of the planters, which are so often the theme of song and story, are on some of the famous old plantations gone to ruin, but many of them survive in their pristine beauty and many other such abodes of culture and wealth have been reared in many other places. Some of the modern homes surpass in elegance of appearance, and certainly in convenience, any of those of olden time. Throughout the rural district there are many more neat, attractive homes than ever before.

The telephone, like the telegraph, goes into every nook and corner of the state. Homes in little villages are supplied with telephones and electric lights, just as they are in the cities and large towns.

Beautiful flower gardens and grassy lawns add to the charm of neat cottages and palatial mansions in town and country.

No state can furnish more charming scenery, from the level lands of the coast with their palmetto groves, their live oaks festooned with



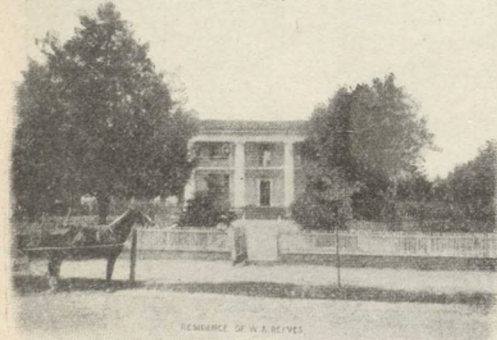
An Ante-Bellum Home, Savannah, Ga.



A COMPREHENSIVE VIEW OF THE THRIVING METROPOLIS



La Grange, Ga.



Ante-Bellum Residence of Georgia



La Grange

moss and their flowering magnolias to the clear limpid streams, beautiful waterfalls, lovely valleys and towering mountains of the north.

Mineral springs are found in many parts of north and middle Georgia and artesian wells give health to the level stretches of the south.

Every section of the state is drained by rivers of considerable size, with their tributary streams and creeks. The drainage system consists of nine basins, each named for some great stream which drains it, with its own waters and those of one or more of its tributaries.

The chief navigable rivers are the Savannah, the Chattahoochee, the Oostena, the Coosa, the Flint, the Oconee, the Ocmulgee, the Ogeechee, the Altamaha, the St. Mary's, the Satilla and the inlets and sounds flowing between the mainland and the pretty islands that skirt the Georgia coast from the Savannah to the St. Mary's rivers.

Georgia has many other advantages to offer. There is her excellent system of public schools, her colleges and universities for both sexes, her churches of all denominations carrying the light of religion to her remotest borders, and her great benevolent and charitable institutions. Nearly every family is identified with some Christian church, for in the main Georgians are a religious people.

Georgia's progressive spirit has been one of her great characteristics, from the day when she emerged from the fearful and prolonged struggle for independence up to the period that threatened for a



OF THE SOUTH—ATLANTA FROM THE STATE CAPITOL

time to divide the Union into two great republics, or through the dark night of reconstruction to the present day, when she seems to go forward by leaps and bounds to loftier and still loftier heights of prosperity.

Georgia's enterprise in manufactures and railroad construction obtained for her in the early thirties of the last century the proud title, "Empire State of the South," which she still worthily wears. In 1827, near Athens, the seat of Georgia's first university, was begun the first cotton mill south of the Potomac. Its originators were Augustine S. Clayton, Thomas Moore, Asbury Hull, James Johnson, and W. A. Carr. In 1833 John White became superintendent of what was then called the Georgia factory, which to this day is owned by his descendants. Between 1830 and 1850 other factories for the manufacture of cotton and woolen goods were established at Athens and near Eatonton, Milledgeville, Madison, Nickajack and Roswell. In 1851 the Eagle Mills were built at Columbus and about the same time the Augusta factory, consisting of two mills, was established on an enduring basis. The first mill of the Augusta factory began to be operated in 1847 on the Augusta canal, which, being completed the same year, and greatly enlarged in 1875, gives to that city, often styled the Lowell of the South, a magnificent water power, which runs at this day many other large cotton mills, besides flour and grist mills, two of the latter having been in operation as early as 1852. The Augusta Canal has yet many water



A Modern Georgia Home



Ante-Bellum Residence, La Grange, Ga.



La Grange, Ga.

powers to dispose of. The cotton and woolen mills at Roswell, on the Chattahoochee, in Cobb County, were famous in 1852, and sold their goods in Georgia, Alabama and Tennessee. Here, during the war between the states, woolen goods were manufactured, from which neat suits for ladies and gentlemen were made, and they were sold for this purpose in Georgia and the neighboring states.

Other manufacturing enterprises in the state were flour and grist mills, saw and planing mills, furniture factories, foundries, blast furnaces, marble and granite works, wagon and many other kinds of factories. The Central of Georgia was the first railroad completed in the state (1833) and extended originally from Savannah to Macon. The second was the Georgia Railroad, chartered December 31, 1833, and was to connect Augusta with Athens, but the main line was extended from the point where it now branches off to Athens and was finally completed to the southeastern terminus of the Western & Atlantic Railroad, which had been selected as the best point for "the running of the branch roads to Athens, Madison, Milledgeville, Forsyth and Columbus." This point of meeting for all these roads was in 1837 called "Terminus." In 1843 a little railroad village had grown up there, and the name "Marthasville" was given to it in honor of the daughter of ex-Governor Lumpkin, who had been distinguished for his interest in railroad construction in Georgia. In 1846, Atlanta, derived from the word Atlantic, was suggested by Mr. J. Edgar Thomson, chief engineer of the Georgia Railroad, in a letter to Mr. Richard Peters, also an engineer of the road, as an appropriate name for what was then Marthasville. He and a Mr. Garnett agreed upon the name, and on December 29, 1847, the Georgia legislature chartered as the city of "Atlanta" the new town, which at that time had 500 inhabitants. By the census of 1850 the population had reached 2,572, and the young city, the child of railroads and manufactures, began her wonderful career of growth and enterprise. It was already linked by bands of steel and iron with Chattanooga, Rome, Macon, Augusta, Savannah and Columbus. By 1860

Atlanta's population had reached 9,554.

Georgia pressed forward on her march to greatness and wealth, which, checked for a while by disastrous war and more disastrous years that followed, was resumed after appalling obstacles had been surmounted by this noble commonwealth of dauntless courage, whose invincible spirit of daring enterprise is under the blessing of God leading her on to greater fame and fortune.

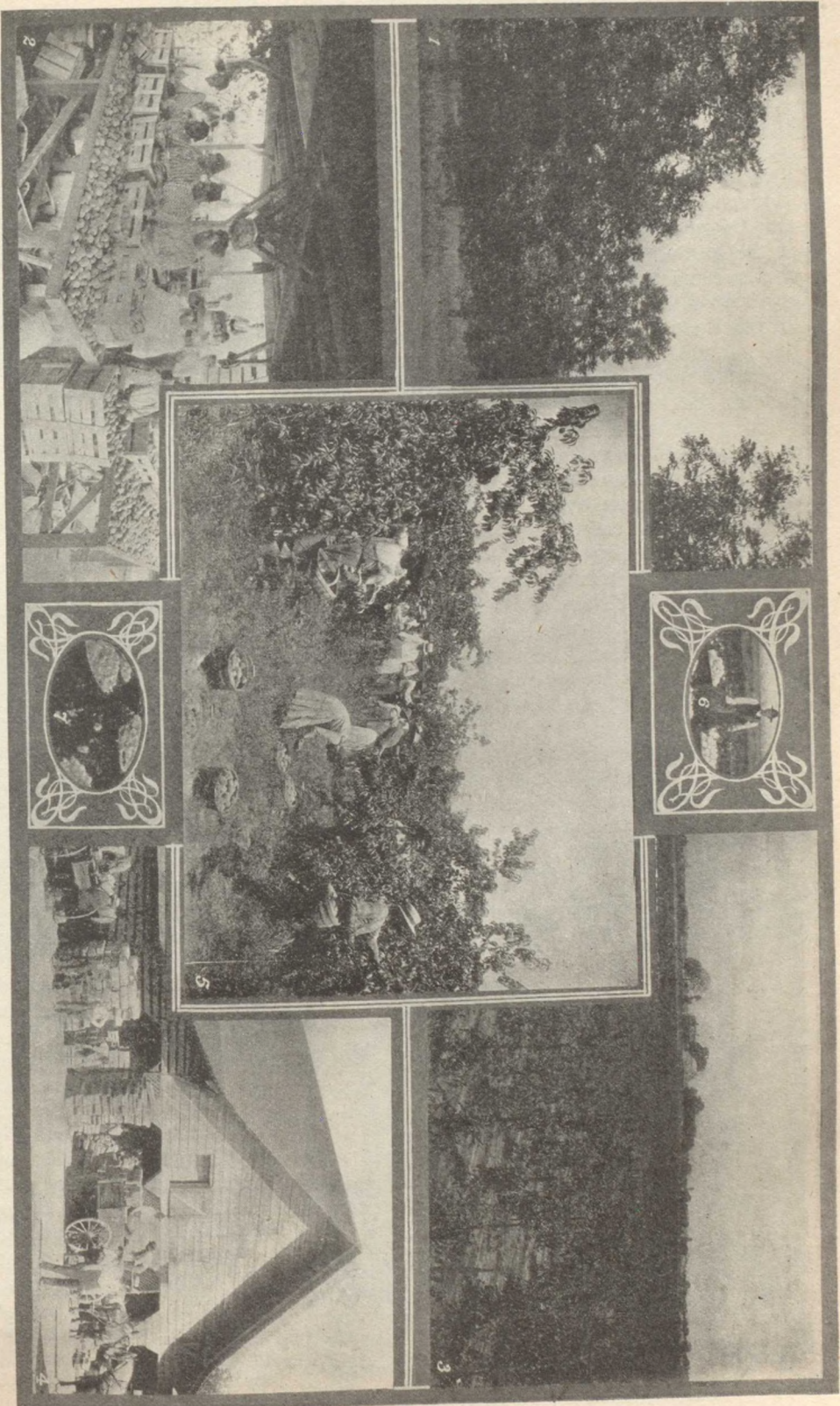
Georgia, like New England, began in the early days of the American republic to send forth thousands of her citizens to aid those of other states to build up new commonwealths, and yet in 1860 her population was twelve and four-fifths times that of 1790. In the same period that of Massachusetts had increased to three and one-fifth times, that of Pennsylvania to six and three-fifths times, and that of New York to eleven and two-fifths times that of 1790.

In 1860 the per capita wealth of these same states was as follows: Massachusetts, \$662; Pennsylvania, \$487; New York, \$475; Georgia, \$611.

At that time the valuation of Georgia's property was: Real estate, \$210,098,682; personal property, \$476,227,404, making an aggregate of \$686,326,086. Of the personal property about \$227,000,000 consisted of slaves, who numbered 462,198.

Adding to the aggregate property in 1860 the railroad property, estimated at \$10,000,000, and the value of manufactured products, \$16,925,564, we have a total valuation of \$713,251,650.

At the close of the disastrous war period Georgia's values had been reduced to about \$200,000,000, and by 1880 amounted to only \$251,424,651. By the comptroller-general's report for 1908 Georgia's real and personal estate had reached, according to the valuation fixed upon it, the amount of \$584,199,197, and including railroad, telegraph and express property, \$705,382,425. Of real and personal property the negroes own \$27,042,672. But the assessed valuation is considerably short of the true value, which, according to the report of the United States Census Bureau for 1904, shows a total of \$1,167,445,671. The United



1—A Pecan Grove 2—Interior of Peach Packing House

THE INDUSTRY OF GEORGIA

3—Vineyard near Tallapoosa, Ga. 4—Exterior of Packing House 5—Picking Peaches
6 and 7—Cotton Scenes

States census reports give us the per capita wealth of the states from 1850 to 1904. Georgia's per capita is as follows: 1850, \$370; 1860, \$611; 1870, \$226; 1880, \$393; 1890, \$464; 1900, \$422; 1904, \$493.

It must be remembered that before the war Georgia's per capita was estimated on the white population only. Estimating on the same basis in 1908 it would run above \$850.

Had there been no such hindrance as the war and reconstruction periods, who can doubt that Georgia would to-day rank among the very foremost in wealth? Nothing but well-directed energy, backed up by invincible courage and the blessing of God, could have wrought the wonderful recuperation shown by our great state. With the same enterprise, crowned by even her average success, we may confidently predict a marvelous growth for Georgia during the next twenty years.

According to the United States census of 1900 Georgia had 7,504 manufacturing establishments, with a capital of \$89,789,686, employing 83,842 hands and turning out products valued at \$106,654,527. A bulletin of the United States Census Bureau published in 1905 selected from the above more than 7,000 establishments, 3,015 having a capital of \$70,803,316, employing 83,336 hands and manufacturing products valued at \$94,532,368, and



McKey Building, Valdosta, Ga.



Atlanta's Newest Railway Station

showed how this class of establishments had in those five years increased to 3,219, with a capital of \$135,211,551, employing 92,749 wage earners and turning out products valued at \$151,040,455.

Included in the manufacturing establishments reported for Georgia in 1900 were 68 cotton mills, with 817,345 spindles and 19,398 looms. A bulletin of the United States Census Bureau for the year ending August 31, 1908, states Georgia's 36,355 looms. So much for Georgia's growth in manufactures.

Georgia's splendid water powers cheapen greatly the cost of manufacturing. They approximate at the lowest stream stage 500,000 horsepower, which, if produced by steam, would require an annual consumption of 7,000,000 tons of coal. The money value of this power, counting a horsepower at \$20 per annum, is \$10,000,000. By the use of storage dams or auxiliary steam power for short periods during the dry season, fully 1,000,000 horsepower, at a low estimate, can be realized. It is estimated that the continual labors of the 20,000 of Alabama's coal miners in 1907 could not supply the furnaces with coal enough to produce a steam power equal to Georgia's water power.

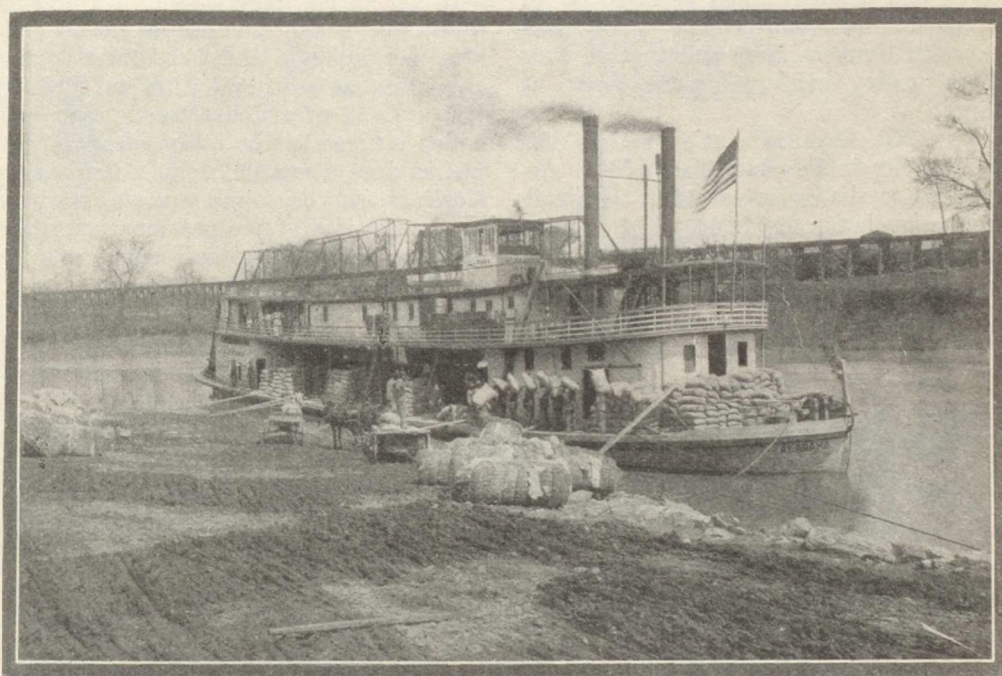
The manufacture of ore from the cottonseed is a post-bellum industry. In 1901 there were 58 cotton ore mills in Georgia, which paid \$5,000,000 for cottonseed, and had finished product worth \$14,000,000. There are now 130

cotton oil mills, with a finished product of \$17,000,000.

The establishments for the manufacture of commercial fertilizers number 220 in Georgia and they do an immense business in all the southern states.

In 1900 there were reported in Georgia 1,254 establishments, with a capital of about \$12,000,000, engaged in the lumber industry. In 1907 the lumber cut of Georgia was 853,697,000 feet. In 1900 Georgia exported 14,623,328 gallons of

Georgia approximates \$10,000,000. Among these minerals are coal, iron, manganese, roofing slate, aluminum (or bauxite), gold granites, gneiss, marbles, corundum, asbestos, copper, pynte, mica, talc and bante. There is also an abundance of limestone for building purposes and for calcimining, kaolin and clays suitable for the manufacture of porcelain, enameled brick, chinaware, terra-cotta, sewer pipe, the coarser grades of earthenware and common brick. On the



Georgia Water Transportation

spirits of turpentine and 1,408,928 barrels of turpentine, resin and pitch.

The commercial flour and grist mills of Georgia numbered 114 in 1905, with a capital of \$1,875,718 and products valued at \$8,178,926. There are besides hundreds of little neighborhood mills. In 1905 Georgia had six creameries and hundreds employed in the dairy business all over the state.

Among Georgia's important manufactures are her marble and stone works, turning out building and paving stones and splendid marbles of many varieties, for which Georgia is so famous throughout the Union.

The annual output of the minerals of

coastal plains are found marls and phosphates. In the northern counties have been found amethysts and sapphires, diamonds, moonstones and rubies.

Georgia's railroads, which in 1860 embraced about 1,400 miles, now cover the state, with a total of 6,704 miles. Electric lines afford rapid transit in all the larger cities and towns, connecting them with their suburbs and neighboring towns, and having a total of 417 miles.

Banking privileges are ample. There are in Georgia about 500 state banks and 100 national banks, with a state banking capital of \$35,000,000 and deposits amounting to \$86,000,000.

According to a census taken in 1908

the total school population of Georgia, taking all from 6 to 18 years of age, was 735,471, of whom 386,277 were white and 349,194 were colored. The enrollment was 508,403, of whom 306,891 were white and 201,512 colored. Between 79 and 80 per cent of the white children and 58 per cent of negro children were enrolled in the schools. The total population of Georgia in 1900 was 2,216,331, or 26.8 times as large as in 1790. At that time the population of Massachusetts was seven and one-half times as large as in 1790, that of Pennsylvania more than fourteen times as large and that of New York more than twenty-one times as large.

In 1860, Savannah, at that time the largest city in the state, had 9,554. According to the census of 1900 Savannah had a population of 54,244, which in 1906 was estimated by the United States Cen-

sus Bureau at 68,000. According to the same authorities Atlanta had in 1890 a population of 89,872 and 104,984 in 1906. Savannah now claims about 80,000 and Atlanta between 120,000 and 150,000. Augusta, which had 12,000 in 1860 and 39,000 in 1900, now claims nearly 50,000. Macon's population of 8,000 has grown to about 35,000.

Georgia has as much to offer to the immigrant from sister states or foreign lands as any other state in the Union, with her varied climate, soil and productions, her grand mountains, lovely valleys, her uplands and her coastal plains and skies as soft and blue as those of Italy; to all of which attractions may be added a home in the midst of noble people, as pure a sample of the Anglo-Saxon stock as can be found anywhere within the boundaries of the great nation, which all of us are proud to hail as our country.



20,000 Acres Sumatra Tobacco, Amsterdam, Ga.

This is not convict labor. The sun shining through the shading slats gives the striped effect

THE CRUCIBLE OF MODERN THOUGHT

By THOMAS H. CUYLER

(SECOND PAPER)

The Influence of the Transcendental Movement



Another straw showing which way the philosophical wind is blowing, in these days of intellectual unrest, and as a corroboration of the statements made in the opening article of this series, we ask that you consider the following quotations from the latest work of Professor William James, of Harvard University, which work is based upon a series of lectures upon the philosophical situation of the present day. It should be stated, however, that these quotations do not necessarily represent Professor James' own personal beliefs or opinions, but are merely expressions of his observations regarding the prevailing spirit of modern philosophical thought in the universities and among men of advanced education.

A Change of Intellectual Climate

Professor James says: "Those of us who are sexagenarians have witnessed in our own persons one of those gradual mutations of intellectual climate, due to innumerable influences, that make the thought of a past generation seem as foreign to its successor as if it were the expression of a different race of men. The theological machinery that spoke so livingly to our ancestors, with its finite age of the world, its creation out of nothing, its judicial morality and eschatology, its relish for rewards and punishments, its treatment of God as an external contriver, an 'intelligent and moral governor,' sound as odd to most of us as if it were some outlandish savage religion."

The Pantheistic Field of Vision

Professor James then goes on to speak of the spirit of modern philosophical thought in the universities, as follows: "Dualistic theism is professed at all Catholic seats of learning, whereas it has of late years tended to disappear at our British and American universities, and to be replaced by a *monistic pantheism more or less disguised*. I have an impression that ever since T. H. Green's time absolute idealism has been decidedly in the ascendant at Oxford. It is in the ascendant at my own university of Harvard." Also: "Our contemporary mind having once for all grasped the possibility of a more intimate *weltanschauung*, the only opinion quite worthy of arresting our attention will fall within the general scope of what may roughly be called *the pantheistic field of vision*, the vision of God as the indwelling divine rather than the external creator, and of human life as part and parcel of that deep reality." (The italics are our own, and do not appear in the original.)

The Influence of Transcendentalism

In the present article it is our purpose to consider one of the most direct and immediate of the "innumerable influences" to which is due the present "gradual mutation of intellectual climate, that makes the thought of a past generation seem as foreign to its successor as if it were the expression of a different race of men," as Professor James has so well stated. This direct and immediate in-

fluence of which we speak, which has had so much to do with the bubbling of the Crucible of Modern Thought, is the influence of the Transcendental Movement of New England of 1830-1850, and of the influence of Emerson in particular. We feel justified in asserting that the present condition of Spiritual Unrest and the prevalence of Monistic Idealism, while having its original source far back in the past history of thought, nevertheless reached us through the direct channel of the great Transcendental Movement in New England in the first half of the last century, and largely through the individual channel of expression of Ralph Waldo Emerson. The lovers and admirers of Emerson have long claimed this, and the opponents of the movement are now beginning to recognize it. As one disgusted orthodox speaker recently said: "*Emerson is the fellow who is at the bottom of all this trouble. His pantheistic teachings are now bearing fruit.*"

The Beginnings of the Movement

The beginnings of the Transcendental Movement in New England may be seen in the remarkable interest manifested during the first twenty-five years of the nineteenth century toward the classical literature of England and Germany, on the part of educated New Englanders. Previous to that time the influence of Locke and Bentham had been dominant in philosophical thought in this country. The theory of "innate ideas" was denied, and there was a decided tendency in favor of the utilitarian basis of ethics and morals. Protesting against this view, some of the American Unitarians advanced ideas which, even in that early day, were denominated "the new thought," and declared their preference for the conception that man possessed "innate ideas" and also higher faculties transcending the senses and the ordinary understanding. These advocates of the earlier "new thought" felt that religion and morality had a higher source than ordinary reason, and must be placed in the category of revelations of the intuition of man, arising from the presence of the Indwelling Spirit.

The Soil Prepared

The influence of Coleridge, Wordsworth, Herder, Goethe and others began to displace that of the old literary idols, and exerted a decided direction in the formation of the "new thought" which was supplanting the older philosophical conceptions. Coleridge taught the doctrine of a higher reason, or transcendental intuition, by which he held the advanced soul might exercise an *immediate perception* of things supersensible, and which was not a faculty or property of the mind, but rather the manifestation of the Indwelling Spirit, which latter was a spark from the Universal Spirit. He held that there was but One Spirit, which was shared in by all human beings; the Many being, in a sense, identical with the One. Wordsworth taught a poetical pantheism, with its conception of a Nature animated by the Universal Spirit, and as Universal Mind manifested as Law and Order. The influence of Goethe and other German writers were in the same general trend—all pointed in the direction of a new pantheistic philosophy. A new interest was awakened in Plato, and the Neo-Platonists, and a demand was shown for the writing of the mystics and idealists of the past. In this fruitful soil, the roots of the New England Transcendental Movement found that nourishment which led to its rapid growth.

What Is "Transcendentalism"

Transcendentalism has been defined, briefly, as "*the philosophical conception that there can be knowledge of transcendental elements, or matters wholly beyond the ordinary experience of the human mind.*" The term was used by Kant. As Wallace says: "Kant's philosophy describes itself as Transcendentalism. The word causes a shudder, and suggests things unutterable." Transcendentalism is diametrically opposed to the philosophical views which hold that all knowledge arises from sensation or experience, and is also opposed to the agnostic view that Reality is Unknowable. But the term itself has taken on a wider and more general signification by reason of its popular use by the New England Trans-

centualists, and its identification with the philosophy of Emerson, in the popular mind. In fact, the English-speaking peoples now use the word generally in the sense of designating the ideas and principles of the New England School, rather than those of the Kantian philosophy.

"Transcendentalism" Defined

Margaret Fuller, one of the prominent New England Transcendentalists, in her "Memoirs," says: "Transcendentalism was an assertion of the inalienable integrity of man; of the immanence of Divinity in instinct. . . . On the somewhat stunted stock of Unitarianism, whose characteristic dogma was trust in human reason, as correlative to Supreme Wisdom, had been grafted German Idealism, as taught by masters of most various schools—by Kant and Jacobi, Fichte and Novalis, Schelling and Hegel, Schleiermacher and de Wette, by Madam de Stael, Cousin, Coleridge, and Carlyle; and the result was a vague, yet exalting, conception of the god-like nature of the human spirit. Transcendentalism, as viewed by its disciples, was a pilgrimage from the idolatrous world of creeds and rituals to the Temple of the Living God in the soul." Herzog gives us the orthodox view of the philosophy, in his "Religious Encyclopedia," as follows: "In religion, the typical Transcendentalist might be a sublimated theist; he was not, in any accepted sense, a Christian. He believed in no devil, in no hell, in no evil, in no dualism of any kind, in no spiritual authority, in no Savior, in no Church. He was humanitarian and an optimist. His faith had no backward look; its essence was aspiration, not contrition." This last quotation is particularly interesting, inasmuch as it proves the contention of the influence of Transcendentalism upon the modern philosophical and religious thought. Compare Herzog's statements of what the Transcendentalist *did not believe*, and what *he did believe*, with the prevailing spirit of religio-philosophical thought, and see how the criticism of Transcendentalism becomes the prophecy of the popular

thought of the early Twentieth Century! Surely this is a clear case of Cause and Effect.

The Welding of the Material

About 1830, and the years immediately following, the various elements from which the Transcendental Movement was afterward composed began to approach each other, drawn together by the attraction of common interest. Emerson's "Nature," written in 1836, was an active element in the crystallization, although the writings of others had much to do with the amalgamation. These several books were so closely identified in their general philosophies and tendencies, that their readers began to form a loosely connected cult. Channing and Ripley, both prominent in Unitarianism and the "new thought" of the day, finally got together and formed a society for mutual endeavor and philosophical inquiry. Emerson, Margaret Fuller, Channing, Ripley, Brownson and Hedge, all prominent in the general movement, met and discussed the formation of a society. The term "Transcendentalism" was then first applied to the movement. Emerson says of this: "Nobody knows who first applied the name." The society was first called "The Symposium" and afterward "The Transcendental Club." Among the general subjects forming part of the earlier discussions were those of "Pantheism" and "Mysticism," respectively. The interest in the movement grew rapidly, and many of the brightest minds in New England were attracted to it. While the subjects discussed, taught and considered were various, it is safe to say that as a whole they were most "unorthodox" and contrary to the general public belief and opinion. Many of the ideas and opinions so advanced are quite familiar to the people of the present day, and are taught in many pulpits, but at the time of the Transcendental Movement they were regarded as heretical and atheistic, and aroused the fiercest denunciation and antagonism from the orthodox pulpit and press.

The formation of the Brook Farm Community at West Roxbury, Mass., by

George Ripley, in 1841, is a part of the history of Transcendentalism, for the reason that some of the leading lights in the latter movement became members of the new community. Men like Ripley, Hawthorne, Alcott, Curtis, Channing and Dana, and women like Margaret Fuller, added a brilliancy to the Brook Farm Community, which has given it a prominent place in the history of the general movement. The aim of the community, as stated by one of their number, was "more effectually to promote the great purposes of human culture, to establish the external relations of life on the basis of wisdom and purity." The community flourished for a number of years, but like all such attempts, finally failed, the members dispersing, but carrying the spirit of the community with them in many directions.

"The Dial"

In 1840, the publication of "The Dial" began. This was the organ of New England Transcendentalism, and naturally served to bring the movement into still more general notice and popularity. Margaret Fuller was the first editor, and Emerson, Channing, Alcott, Theodore Parker, Ripley, and Thoreau were among the contributors to the first number. Emerson wrote the opening article, entitled: "The Editors to the Reader." During the first two years of the existence of "The Dial" Margaret Fuller was assisted in her editorial work by Ripley and Emerson. After that time Emerson became the sole editor. Much that was crude and fanciful appeared in the pages of this publication, but also much that will hold a permanent place in the history of American literature. It marked an era in the history of American magazines, and gave an impetus, the effects of which are still noticeable. After four years of struggle it was finally discontinued.

The "Great Awakening"

The life of the Transcendental Movement may be said to be embraced by the years 1830 and 1850, although the beginnings were still further back in the century, and the influence of the move-

ment still lives as the heart and spirit of many modern schools of thought and activity which are slow to acknowledge their indebtedness to it. Its real source was the Great Awakening of nearly a century before its time, in which the hold of Calvinism was rudely shaken and weakened, and which brought to the New England mind a new interest in Arminianism and Arianism, and which served to prepare the cradle for Unitarianism, which was afterward born. Transcendentalism was the natural spiritual child of the great Spiritual Unrest which had preceded it by about a century, and which wrought a great change in religious and philosophical thought and ideals in New England, which section at that time undoubtedly was the intellectual center of this country. It was the offspring of liberal Christian thought, combined with Neo-Platonism, Oriental Religions, and Occult Philosophy. It was perhaps nearer akin to what philosophy calls "Mysticism" than to any other one form of thought.

An American Renaissance

The spirit of Transcendentalism was most elusive, as all writers have remarked. The current impression at the present time may be stated in a quotation from Professors McGilvery and Trent, in their article on the subject in the "New International Encyclopedia," as follows: "It is difficult to disengage the elements, to delimit it in point of time, to say what it really accomplished, to determine what it became. . . . The era of the Transcendentalists was in many respects an American Renaissance, the effects of which were not confined to this country, but were spread chiefly through the writings of Emerson, Thoreau and Channing, to England, and to some extent to the Continent of Europe. That their ideas were vague and often transcended reason, not to say common sense, that their literary work was largely amateurish, that their extravagances gave much occasion to legitimate ridicule, that their so-called movement was the forerunner of religious and social manias of all sorts, can scarcely be gainsaid; but it is equally idle to deny the loftiness of

their aims and the importance of their work."

What Came of It

Be one's opinion of Transcendentalism what it may, no careful student of the Transcendental Movement can doubt the fact that in it may be found the underlying and immediate causes of the modern effects, manifested as the "New Thought" movement, on the one hand, and the tendency toward Monistic Idealism, or Pantheism, evidenced in the philosophical thought of to-day, on the other hand. While it is true that the real causes of these later movements must be sought for still further back in the history of human thought, it cannot be doubted that the older impulses reached the present movements through the direct channel of the Transcendentalism of New England. An examination of the teachings and writings of that school, when compared with those of the later schools, shows a direct chain or sequence and of cause and effect. Those who are looking for the *causes* of the modern schools of thought will fail to find them unless they take into active consideration the Transcendental Movement of New England, of 1830-1850. And not only is this true, but it will be found that many other and apparently unrelated schools of thought arose about the same time, not entirely in sympathy with the general movement, but apparently arising from the influence thereof. Some of these side schools have their modern successors, tracing descent in a direct line. So that the influence of Transcendentalism in New England may be considered *the one vital factor* which has brought about that state of affairs which has resulted in the old conceptions sounding "as odd to most of us as if it were some outlandish savage religion," as Professor James has said; and in making possible the statement of the same careful authority that "the only opinion quite worthy of arresting our attention will fall within the general scope of what may roughly be called the pantheistic field of vision, the vision of God as the indwelling divine, rather than the external creator, and of human life as part and

parcel of that great reality." Transcendentalism is the direct and immediate cause of this state of affairs. And Ralph Waldo Emerson is recognized as the fullest and clearest expression of Transcendentalism. As the orthodox speaker previously quoted said: "Emerson is the fellow who is at the bottom of all this trouble." Then let us see what Emerson really taught, and what he stood for. This will help to show us the connection between 1830-1850 and 1909.

The Work of Emerson

We shall not attempt to present, even briefly, an account of the life and work of Emerson. The facts regarding the man and his work have been told, and retold, by far abler pens. The libraries are filled with books giving this information from the viewpoints of their respective writers. The encyclopedias give full accounts, more or less impartial, regarding the career of this brilliant star which blazed in the firmament of thought, and which, although it has been resolved into its original elements, still serves to brighten the minds and lives of men to-day, and will serve a like purpose for many generations to come. For our present purpose it is sufficient to consider the philosophy of the man, particularly in its phase of the cause for, and guide of, the spirit of the thought of to-day which so many think has risen suddenly without an especial cause. As Plato says: "The problem of philosophy is, for all that exists conditionally, *to find a ground unconditioned and absolute*," and from his first notable work, entitled "Nature," Emerson sought to establish his idea regarding that "ground unconditioned and absolute."

The Philosophy of Emerson

In considering the philosophy of Emerson, one must not expect him to proceed, as have the majority of other philosophers, by scientific and logical reasoning—his method was rather intuitional than rational, in the ordinary usage of the latter term. Trent says of him: "Being himself a man of many intuitions, and of wonderful vigor in phrasing them, he is to be regarded as a prophet rather

than as a philosopher. He sought to construct no system, but stood for a *constant idealistic impulse*. What he wrote was not based primarily on experience, nor did he ever write as the so-called man of the world. He is criticized for relying chiefly or altogether upon his intuitive consciousness, instead of submitting his generalization to the test of reason."

Emerson, the Idealist

Emerson was essentially an Idealist. Personally, he preferred the latter term to that of "Transcendentalist," as which he was classed by the men of his day, and which causes his philosophy to be termed Transcendentalism. He said that the majority of people did not know what they meant by the latter term. He said, whilst in the midst of the work of the Transcendental Movement: "What is popularly called Transcendentalism among us is *Idealism*—Idealism as it appears in 1842. . . . The Idealism of the present day acquired the name of Transcendentalism by the use of that term by Immanuel Kant of Königsberg, who replied to the skeptical philosophy of Locke, which insisted that there was nothing in the intellect which was not previously in the experience of the senses, by showing that there was a very important class of ideas, or imperative forms, which did not come by experience, but through which experience was acquired; that these were *intuitions* of the mind itself; and he denominated them *Transcendental* forms. The extraordinary profoundness and precision of that man's thinking have given vogue to his nomenclature, in Europe and America to that extent, *that whatever belongs to the class of intuitive thought is popularly called at the present day, Transcendental.*"

Materialists and Idealists

Emerson makes the following distinction and definition of Idealism: "As thinkers, mankind have ever divided into two sects, Materialists and Idealists; the first class founded on experience, the second on consciousness; they perceive that the senses are not final; they give us representations of things, but what the things themselves are they cannot tell.

The Materialist insists upon facts, on history, on the force of circumstances, and the animal wants of man; the Idealist, on the power of Thought and of Will, on inspiration, on miracle, on individual culture. The Idealist concedes all that the other affirms . . . and then asks him for his grounds of assurance that things are as his senses represent them. But, I, he says, affirm facts not affected by the illusions of sense, facts which are of the same nature as the faculty which reports them. . . . He does not deny the sensuous fact—by no means; but he will not see that alone."

"Tender-Minded" vs. "Tough-Minded"

This definition recalls the celebrated classification of Prof. William James, who, in his work on "Pragmatism," says: "I will write these traits down in two columns. I think you will practically recognize the two types of mental make-up that I mean if I head the columns by the titles 'tender-minded' and 'tough-minded,' respectively:

"THE TENDER-MINDED.	"THE TOUGH-MINDED.
Rationalistic (going by 'principles'),	Empiricist (going by 'facts'),
Intellectualistic,	Sensationalistic,
Idealistic,	Materialistic,
Optimistic,	Pessimistic,
Religious,	Irreligious,
Free-Willist,	Fatalistic,
Monistic,	Pluralistic,
Dogmatical."	Skeptical."

The Mutual Reaction

Professor James adds: "Each of you probably knows some well-marked example of each type, and you know what each example thinks of the example on the other side of the line. They have a low opinion of each other. Their antagonism, whenever as individuals their temperaments have been intense, has formed in all ages a part of the philosophic atmosphere of the time. It forms a part of the philosophic atmosphere of to-day. The tough think of the tender as sentimentalists and soft-heads. The tender feel the tough to be unrefined, callous and brutal. Their mutual reaction is very much like that that takes place when Boston tourists mingle with a population like that of Cripple Creek. Each side believes the other to be inferior to itself; but disdain in one case is mingled with

amusement, in the other it has a dash of fear."

Emerson, the "Tender-Minded"

There is no doubt regarding the place to which Emerson must be assigned in the classification given by Professor James. He is the ideal "Tender-Minded" individual. He is an idealist of the Idealists. As Cooke says: "Emerson belongs in the succession of the Idealists. That company he loves wherever its members are found, whether among Buddhists or Christian mystics, whether Transcendentalist or Sufi, whether Saadi, Boehme, Fichte, or Carlyle. These are the writers he studies, these the men he quotes, these the thinkers who come nearest his own thought. He is in the succession of minds who have followed in the wake of Plato, who is regarded by him as the world's greatest thinker. More directly still, Emerson is in that succession of thinkers represented by Plotinus, Eckhardt and Schelling, who have interpreted Idealism in the form of Mysticism."

Emerson: Intuitive, not Reflective

Whipple says of Emerson as a philosopher: "His intellect is intuitive, but not reflective. It contains no considerable portion of the element which is essential to the philosopher. His ideas *proceed from the light of genius*, and from wise observation of Nature; they come in *flashes of inspiration and ecstasy*; his pure gold is found in places near the surface, not brought out laboriously from the depths of the mine in the bowels of the earth. He has no taste for the apparently arid abstractions of philosophy. His mind is not organized for the comprehension of its sharp distinctions. Its acute reasonings present no charm to his fancy, and its lucid deductions are to him as destitute of fruit as an empty nest of boxes. In the sphere of pure speculation he has shown neither originality nor depth. He has thrown no light on the great topics of speculation. He has never fairly grappled with the metaphysical problems which have called for the noblest efforts of the mind in every age, and and which, not yet reduced to positive

science, have not ceased to enlist the clearest and strongest intellects in the work of their solution. On all questions of this kind the writings of Emerson are wholly unsatisfactory. He looks at them *only in the light of the imagination*. He frequently offers brave hints, pregnant suggestions, cheering encouragements, but no exposition of abstract truth has ever fallen from his keen pen."

As a philosopher, Emerson belongs to that class of geniuses who may be termed intuitional, inspirational, awakers, stimulators. As Cooke well says of him: "Emerson belongs to that company of illuminated souls who have done for the modern world what the sages, prophets and seers did for the ancient world." He is a Hindu *guru*, or a Sufi *pir*, rather than a Western teacher. He disdains the necessity of *proof*, and feels that his words should carry their own proof. His is the attitude of the sage of the Orient, rather than of the professor of philosophy of the Western world.

Of Royal Mystic Descent

That Emerson's thought is based upon that of Plato and the Neo-Platonists cannot be doubted, although there always appears running through his mental creations the golden thread of the teachings of Oriental thought. Plato would claim him as a son—the Hindu Vedantist and the Persian Sufi would claim him as a brother. Mystics of every age, and of every land, would welcome him as of their own kind. Believers in Reincarnation would attribute to him successive births first in Hindu and in Persian bodies, and later in the fleshly garments of philosophers of Ancient Greece. He is of the Royal Mystic descent, in a straight and unbroken line. His "Over-Soul" might have been written either by a Hindu Vedantist, a Persian Sufi, or a "god-drunken" Grecian philosopher. Modern advocates of what is called "Cosmic Consciousness" find an explanation for his genius in their theories, and, indeed, in his "Over-Soul" he gives utterances that would indicate an experience of the kind indicated by this school.

Emerson holds that God is the Universal Substance, from which the universe

is formed; the Universal Mind which holds the mind of all; the Universal Spirit which is immanent in all men. He says: "There seems to be a necessity in Spirit to manifest itself in material forms; and day and night, river and storm, beast and bird, acid and alkali pre-exist in necessary Ideas in the mind of God, and are what they are by virtue of preceding affections in the world of Spirit." He says: "The world proceeds from the same Spirit as the body of man. It is a remoter and inferior incarnation of God, a projection of God in the unconscious." He says: "Under all this running sea of circumstance, whose waters ebb and flow with perfect balance, lies the original abyss of real Being. Essence, or God, is not a relation, or a part, but the whole. Being is the vast affirmative, excluding negation, self-balanced, and swallowing up all relations, parts, and times within itself. . . on every topic is the resolution of all into the everlasting One."

The All in All

To Emerson, God is all in All, and All in all. He says: "Truth, goodness and beauty are but different faces of the same All. . . . God is, and all things are but shadows of him." And, again: "The true doctrine of omnipresence is, that God reappears with all His parts in every moss and cobweb. The value of the universal contrives to throw itself into every point." But Emerson does not try to define God. Like Spinoza, he holds that "to define God is to deny him." He says: "Of that ineffable essence which we call Spirit, he that thinks most will say least." And again: "We can foresee God in the coarse, and, as it were, distant phenomena of matter, but when we try to define and describe himself, both language and thought desert us, and we are helpless as fools and savages. That essence refuses to be recorded in propositions; but when man has worshiped intellectually, the noblest ministry of nature is to stand as the apparition of God. It is the organ through which the universal spirit speaks to the individual, and strives to lead back the individual to it." He sings:

"Thou meetest him by centuries,
And lo! he passes like the breeze;
Thou seek'st in globe and galaxy,
He hides in pure transparency;
Thou askest in fountains and in fires,
He is the essence that inquires.
He is the axis of the star;
He is the sparkle of the spar;
He is the heart of every creature;
He is the meaning of each feature;
And his mind is the sky,
Than all it holds more deep, more high."

Brahma

His poem, "Brahma," voices the true Oriental spirit when it says:

"If the red slayer thinks he slays,
Or if the slain thinks he is slain,
They know not well the subtle ways
I keep, and pass, and turn again.
Far or forgot to me is near;
Shadow or sunlight are the same;
The vanished gods to me appear;
And one to me are shame or fame.
They reckon ill who leave me out;
When they fly, I am the wings;
I am the doubter and the doubt,
And I the hymn the Brahmin sings.
The strong gods pine for my abode,
And pine in vain the Sacred Seven;
But thou, meek lover of the good!
Find me, and turn thy back on heaven."

Emerson and Pantheism

To Emerson, God is not a far-away Deity, but immanent Being. Emerson might have written the very words of Goethe, when the latter says: "What kind of God was he who impelled things only from outside, and let the universe twirl around his fingers? God moves the world inwardly, cherishes nature in himself, himself in nature, so that whatever lives and works and exists in him never misses his power nor his spirit." It formerly was the fashion to defend Emerson from the charge of Pantheism, because that term was misunderstood, or understood only in one of its senses. Theodore Parker once wrote regarding Emerson: "He has absolute confidence in God. He has been foolishly accused of Pantheism, which sinks God in Nature; but no man is further from it." But Emerson is a *Pantheist*, in the usage of the term which indicates that God is immanent in his Nature, and that all substance is of the One Substance; all mind of the One Mind; all spirit of the One Spirit. His, indeed, is the forerunner of the teaching of to-day, which, as Professor James has said, "may roughly be called *the pantheistic field of vision, the vision of God as the indwelling divine rather than the external creator, and of human life as part and parcel of that*

deep reality." No one who reads his "Nature" and his "Over-Soul" can have any doubts as to Emerson's true position regarding true Pantheism, nor his being the direct inspiration of the modern trend of thought in that direction.

Communion with the "Over-Soul"

Emerson taught that the soul of man had direct relationship with and communion with the Over-Soul, and he agreed with the mystics in believing that such "Union with God" was possible, and even frequent. As Cooke says: "Emerson believed in the Inner Light of the Quaker, the Ecstasy of Plotinus, the Divine Illumination of Swedenborg." He taught the attainment of "Cosmic Consciousness" by the power of Contemplation and The Silence. St. Theresa and Madam Guyon, Plotinus and Swedenborg, would have recognized him as a brother *illuminatus*. He speaks of the power of communion with the Over-Soul as "always a miracle, which no frequency of occurrence or incessant study can ever familiarize, but which must always leave the inquirer stupid with wonder." He says, in one of his essays: "The path is difficult, secret, and beset with terror. The ancients called it *ecstasy* or absence—a getting out of their bodies to think. All religious history contains traces of the trance of saints—a beatitude, but without any sign of joy, earnest, solitary, even sad; 'the flight,' Plotinus called it, 'of the alone to the alone;' the closing of the eyes—whence our word Mystic. The trances of Socrates, Plotinus, Porphyry, Boehme, Bunyan, Fox, Pascal, Guyon, Swedenborg, will readily come to mind. This beatitude comes in terror, and with shocks to the mind of the receiver."

Ineffable Experiences

But, in the end, Emerson, like all of the Mystics, is compelled to report that he finds it impossible to express in words the experiences he wishes to describe. He confesses this repeatedly, but perhaps at no time more beautifully than when he declares: "Every man's words, who

speaks from that life, must sound vain to those who do not dwell in the same thought on their own part. I dare not speak for it. My words do not carry its august sense; they fall short and cold. Only itself can inspire whom it will. . . . Yet I desire, even by profane words, if sacred I may not use, to indicate the heaven of this deity, and to report what hints I have collected of the transcendent simplicity and energy of the Highest Law."

Channels of the New Thinking

A careful examination and study of the Transcendental Movement of New England, of 1830-1850, especially as expressed through the writings of Emerson and more especially through his "Nature" and his "Over-Soul," will convince any fair-minded person that in this Movement, and in this one writer, may be found the *direct and immediate channel* through which has come to us the popular philosophic spirit of the day; the trend of modern religious thought; and the fundamental principles of what has been called "The New Thought" in all of its philosophical and mystical phases. We may find Emerson voicing these "new" truths of to-day, in almost the very words used by the latter-day teachers and writers, many of whom seem unwilling to acknowledge his influence. Over the space of sixty to eighty years these teachings have traveled, and are now awakening into full vigor and power. As important elements in the bubbling and seething Crucible of Modern Thought, Transcendentalism and Emersonianism must be accorded first place. Someone has said that when we seek a Cause, we are really seeking "something to put the blame on." In this case the Cause and the Blame must be placed upon those earnest seekers after truth who formed the "Transcendental Club" in 1836, all of whom passed from the field of conflict without realizing the harvest which has resulted from their industrious seed-sowing. To this earnest band must be accorded the praise or the blame—according to one's particular viewpoint of the subject.

The Third Paper in this Series will appear in the November issue of THE PROGRESS MAGAZINE.

BUILDING THE MIND

By CHRISTIAN D. LARSON

WHEN a mechanic undertakes to construct a machine, erect a skyscraper or build a bridge, he proceeds invariably along scientific lines. Otherwise his work would be all for naught. He first secures the pattern, the model or the design of that which he intends to build; then he proceeds to use his knowledge of the laws of construction in such a way that the building desired will finally be perfected as originally planned.

But do we employ these same exact methods when we proceed to build a life, a group of mental faculties, a character or a destiny? We do not; therefore, the mental building desired is not perfected as originally planned. Though it is too true that the majority neglect to plan any mental building whatever. They have occasional desires as to what they imagine might be necessary to make life more complete, but those desires are never crystallized into any definite plan or ideal; neither the architect nor the builder is called to work, and, in consequence, nothing beyond mere existence is attained.

When a storm comes up, threatening to destroy the skyscraper that is building, do the carpenters and stonemasons and bricklayers proceed at once to undermine the foundation of that building or otherwise weaken its resisting power, so that the storm may more easily proceed with its destruction? No, indeed. When a bridge builder discovers a flood coming to carry away his partly finished work, does he proceed immediately to loosen every beam so that the rushing torrent may have no difficulty in sweeping away everything? He veritably does not.

But when the average mind is in the midst of the storms of calamity and distress, or is about to be carried away by the floods of adversity and failure, what does he do? The first thing he does is

to undermine the foundation of his mind by removing the supporting rocks of will, character and persistence, thus leaving the mental structure practically helpless upon the shifting sands of fear, despondency, weakness and gloom.

The building of things and the protection of physical structures from the storms and the floods and the quakes has become an exact science, and such a fine mechanical art that few disasters are possible any more. But in the building of the mind the methods of the aborigines are still in vogue; and so inefficient are the modes of mental protection that the average mind falls down instantly the slightest breeze of adversity is encountered.

To proceed with the building of the mind, we are not required to undertake something we have never attempted before. We are all mental builders; it is an art that every member of the race has practiced for ages, but the methods employed have been, and still are, for the most part, haphazard. Every thought that any person may think tends either to build up the mind or undermine that which has been constructed before. And the same is true of every feeling that is entertained, every act that is performed or every word that is spoken. Everything that transpires in the human personality works either for construction or destruction. There are no neutral factors in the active life of man.

In the building of the mind there are three essentials that must be constantly observed. The first is to secure the pattern, the model, or the ideal for the more perfect mental structure we have in view. The second is to apply understandingly and constantly the exact laws of mental construction. The third is to introduce only the best material obtainable.

When the mechanic proceeds to erect

his building, whatever the nature of the building may be, he purposely avoids defective material, and in most instances he takes special pains to secure the very best material that the market can produce. But how different it is with the thinker—the mental mechanic. Though he knows that every thought becomes a brick in the mental wall, still he cares little for the quality of those bricks. He selects the poorest ones and the cheapest ones in most instances, and without hesitation, and is surprised when even the lesser storms of life cause his mental structure to collapse.

The mind of man can be made so strong that it will remain untouched, unmoved and undisturbed in the midst of any storm, no matter how severe it may be, or how long it may continue its violence and rage. But such a mind must be free from defective material, and it must be constructed upon exact, scientific principles. The mind that is composed partly of fear, worry, anger, depression, discouragement, weakness, gloom and similar mental states will not stand the storms and the floods and the quakes. There are too many cheap bricks in its walls and the slightest disturbance may cause it to topple over.

The building of the mind is a process that need never cease. Some minds grow steadily until they are twenty or twenty-five; then they take occasional steps forward and occasional steps backward until they are forty or fifty. After that all growth ceases; the mental walls begin to crumble more and more, and ere long the structure is in ruins. Other minds continue to grow for a longer period, while a few continue to grow as long as they live. And such minds alone are true to life. Every mind can grow and should grow continuously; every mind can become stronger, more able, more competent and more efficient every year, so that when the century mark is reached it is far more brilliant and more powerful than it was sixty or seventy-five years before. This is not the mere fancy of ambition's lofty dream. It is scientific fact, and every person who builds his mind with the same care that the mechanic

builds his house or his bridge will prove it to be a fact.

There are buildings in the world that are as good as new, though they have encountered the storms and vicissitudes of nature for a dozen centuries. And there are trees in many parts of the country that are young and strong at the glorious age of 5,000 years and more. But the human mind in this connection has the advantage of everything else in the world. There is nothing that responds as readily as the mind to the process of growth and improvement. The human mind is so constructed that it can be made over new almost instantly and at any time; and every time it is renewed it can be made stronger and finer and more efficient.

To proceed with the building of the mind, the first step is to form the pattern, or what may be termed the creation of ideals. What do you want your mind to become? What do you want each faculty to become? What do you want your character to become? What do you want your life and your destiny to become? These are the great questions to be answered, and the answers that you give will determine the nature of nearly every event throughout your entire future.

To answer these questions, the imaging faculty, that is, the imagination, must be called into constructive play. You must have a pattern of the greater mind that you wish to build, and that pattern must be formed so distinctly in your imagination that you can see it, at all times, as a vivid mental picture. The imaging faculty is usually looked upon as a creator of mental illusions, or as a mental artist that pictures only what is not so and what never can be so. And for this reason the imagination has never been called into its proper sphere as fully and as accurately as it might. Though the imagination of man determines his life and his destiny, still that faculty is nearly always employed without regard to law, purpose or plan, and therefore the life of the average individual is likewise a bundle of confusions and uncertainties.

No mechanic in possession of his reason would proceed to erect a building without first securing the plans. He

would first have an architect make a complete drawing of the proposed building; then he would follow the plan of that drawing in every detail. The imagination is the architect of the mental mechanic, and must be consulted before the building of the mind can be undertaken. First have the imagination make a complete mental drawing of the larger and more perfect mind that you are about to build. Then follow the plan of that drawing in every detail until the building originally planned is finished.

Picture in your imagination the greater mind as a whole; then picture each faculty as you wish it to become; and also picture a life and a destiny that will naturally be the outcome of the action of such a greater mind. Use your spare moments in reviewing these pictures in your imagination. Use your imagination, not in mere idle dreaming, or in picturing the useless, the absurd, or the probable evils of coming days; but use this faculty in bringing before your mind, again and again, the great plan of the new mind, the new life and the new destiny that you are building now. If at any time you can improve upon the great plan, you may safely do so. This will not disturb the process of mind building. You do not have to tear down the old mind in order to build a new one. As the plan of the mental building is improved, the mind will begin to develop along those improved lines. The old will gradually be transformed into the new, just as the bud unfolds into the flower, the flower into the seed pod, and the seeds in turn into more plants and buds and flowers.

But there must be a plan; and when the plan is improved every year, the mental flowers will be more perfect and more beautiful every year. The useless thorn bush has been developed into the rare American Beauty rose; and the primitive Persian fruit tree, the fruit of which was wholly unfit for food, has been developed into a number of the most luscious fruits of today, including the highest grades of our pears, peaches and plums. The same can be done with the undeveloped fruit-trees of character, or the

useless thorn bushes of the mind. Under high cultivation every acre of land can be made to produce from ten to twenty times as much as it does under usual cultivation; and through the proper rotation of crops this high productive power can be maintained for any length of time. The same is true of the garden and the fields of the mind. Every mind can, through proper mind building, become many times as brilliant and many times as powerful as it is now; and through the proper use of every faculty, this exceptional brilliancy and power can not only be maintained, but also improved upon every year.

When you can see clearly the pattern or model that your mental architect has planned for the new building of the mind, the next step is to proceed with actual construction. Every thought you think has the power to build; and the same is true of every desire you entertain or every attitude that you maintain. Never think at random; whenever you do think, think with a purpose, and your thoughts will build the mind up to a point where you can carry out that purpose. Think for results. Think of the results you desire whenever you do think; but in each case the results you desire must be in harmony with the plan of the mental architect.

If you have planned to build up your mind along the lines of rare musical talent, think constantly of the results that such a talent will naturally produce; and inspire every thought with the ambition of musical genius. If you have planned to build a great business mind, think for business results; expect such results in *all* your thinking, and think constantly with the one purpose in view—to become a genius in the business world. Do not permit a single thought to run off at random. Every thought has force, and you want that force in the promotion of your purpose. Every thought is a builder; do not permit a single thought to be idle; and do not permit a single group of thoughts to go off on a strike; you want them all to work on the mental sky-scraper you have undertaken to erect; call them all in to work, and if they are

well paid with harmony and persistence they will all stay.

Every desire that you entertain should desire to perfect the mental building upon which you are at work. Permit no counter desires. Desire to build the mind along the lines you have planned, and continue to make that desire stronger and deeper every day. The powers of your mind not only follow the lines of your desires, but they also tend to work, develop and build up what you desire. If you desire a certain faculty to be doubled in working capacity, and if you make that desire deep, strong and continuous, all the powers of your mind will begin to work together to build up that faculty. That faculty will at once begin to grow, and if your desire continues for a reasonable length of time, the doubled capacity will be secured.

The same law holds with regard to the increase of ability or the attainment of greater brilliancy. Persistent desire will in each case, enlist the building powers of the mind to produce the thing desired.

All thinking should be designed; that is, every action of the mind should aim to work out a definite idea or plan, and all such ideas should be in harmony with the one plan—the plan of the new mental building. When you do not care to think about your building plans, let your mind rest, and let it rest in the proper attitude. If the mind is in the proper attitude, mental building will go on even though the conscious mind itself be quiet. Every moment of repose, however, must be followed by a moment of activity, just as sleep is always followed by wide-awakeness. The attitude of activity builds the conscious mind, and also provides material for building in the subconscious; and it is during sleep and rest, or repose, that this building in the subconscious takes place.

The attitudes of the mind should always have an upward look. The mind should always face the new mental structure that is building, and should always look up towards those greater things that the new mind will naturally produce. The attitude of the upward look, if cultivated in the feelings, as well as in the activities,

of the mind, will tend to promote the building process. Therefore, no matter what may happen, the mind should always look up, and should always act in the moving forward or rising attitude. When the mind is cast down, the building process is not only retarded, but all the powers of the mind are turned away from the great purpose, and are thus scattered. The result is, that the mind, as a whole, is weakened, and many of its faculties are taken down into a place of inferiority. Such a course will naturally result in failure; but if the mind continues to look up and to build itself up, in the midst of the adverse circumstance, the victory will finally be won. It can be stated as a universal truth that no mind can fail if it continues to look up and continues to build itself up, at all times, whether in adversity or in prosperity.

The mind that continues to go up will get out of every difficulty, while the mind that falls down during dark moments may be buried in the debris of misfortune. But if the mind is to go up continuously, scientific mind building must be promoted continuously. And as this process is sufficiently simple for anyone to undertake, every mind may grow more competent and more powerful, regardless of circumstances, and no mind need go under, even though external failure may seem to be complete. The growing mind will spring forth from the ruins of failure into greater and greater success; and where those ruins once were, will erect more stately mansions than were ever undertaken before. It is the truth, however, that a growing mind will never encounter complete failure in anything or at any time. If you are gaining more strength and power and brilliancy every day, you will not only know how to act successfully in the midst of threatening failure, but you will also have added power with which to act. And no difficulty can hold out very long against the constant accumulation of wisdom and strength.

The third great essential is to introduce only the best mental material. In the walls of the average mental structures there are many good bricks, but there are also many that are ready to crumble to

dust. Some of the beams in those structures are quite strong, while the others would break instantly if extra weight were added. How well we know how little burdens disturb the comforts of most minds; and how many minds, even among the stronger, go down under the weight of added responsibilities. Those mental buildings are not properly constructed. They contain too much defective material. That is the reason.

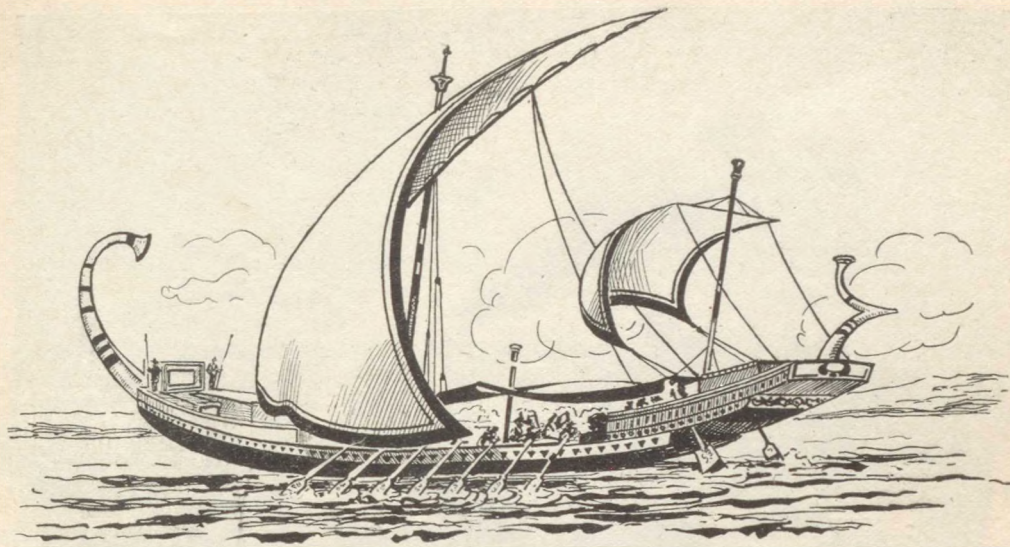
To avoid defective material in the building of the mind every mental state or action that is adverse or inferior in any way whatever must be ruled out. Avoid every thought that is depressing, pessimistic, disappointing or retrograding. Do not find fault with yourself, but expect more and more of yourself. To find fault with yourself, or to be disgusted with your work, is to place a cheap brick in your mental wall. The crumbling of that brick alone may some day cause the whole wall to collapse. For the same reason avoid all worry, all fear, all anger, all

hatred, all discord, all weak mental states and all states or actions that are negative or perverted. All of those things constitute defective mental material, and should be avoided just as rigidly as we would avoid a cracked drive wheel in a locomotive.

Introduce nothing but the strong, the positive, the optimistic, the genuine, the constructive and the wholesome. In the selection of mental material aim to secure richness, quality, high worth and superior strength in every thought, every desire and every mental state or action. And if this rule is followed year after year in the building of the greater mind you will finally have a mind sufficiently strong to stand anything and sufficiently able and powerful to accomplish anything. The majority let the years slip by, doing nothing to build up the mind; you can, without extra time or effort, use those years in the building up of such a mind as shall be without a peer in all the ages of history.



ONE of the secrets of success in character or attainment is to acquire the ability to practice persistently those principles of thought and action on which they are founded, after the zest of newness is past, and repetition has made their performance commonplace and trivial.



EVOLUTION OF THE STEAMSHIP

By JEWETT E. RICKER, JR.



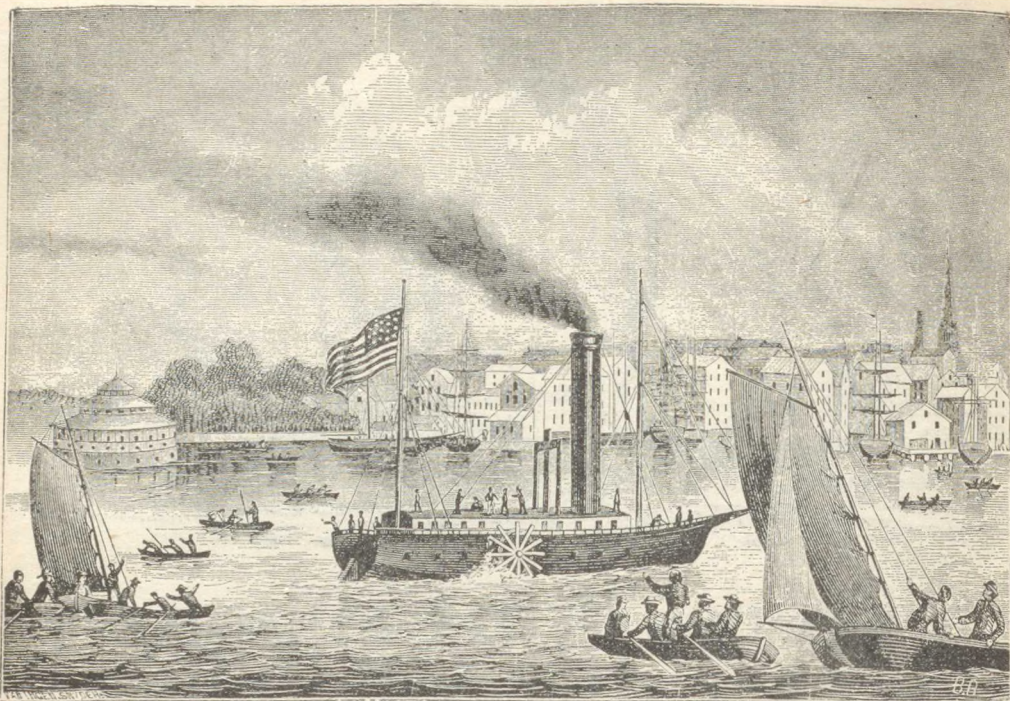
IT is unusual in this age of ceaseless labor and marvelous invention for the world—busied in its work of the present—to stop and reflect upon the marvels of the past. Thus the anniversaries of great events, revolutionary at their time, have passed unnoticed, that the progress of the world might go on unchecked. But now and then there looms up from the pages of the past a name or an event too important in its bearing on the present and the future of the world to go by unanswered by those of the present whom it has benefited and inspired.

It would have been a sacrilege had the name of Lincoln—standing out as it did on the pages of the world's history—been allowed to go by without a full measure of appreciation having been bestowed upon it. And so, for a time last February, the business of the nation stopped, that the name of its great hero might be fittingly honored. But two years before the birth of Lincoln there flashed across

the nation another name destined, in its way, to be emblazoned even more brilliantly upon the world's history. Lincoln, in a broad sense, was a nation builder. But Fulton, the inventor, in quite as great, though in more indirect a way, was a builder of continents. Both fought for what they achieved and both, in the face of almost overwhelming opposition, scored triumphs. Each was inspired by a conviction and each proved his conviction to be correct. Thus far the two men bore similarity to each other. And possibly behind this fact is an obscure reason why it has seemed fitting for the world of today to honor both names this year.

It might seem an extravagant term to honor Robert Fulton with the cognomen of "the father of commerce," and yet a study of his place in the history of the world's commercial growth seems to justify the title. A glance at the steam-propelled merchant fleets of the world seems almost to prove it. And so it is not extraordinary that the Hudson-Fulton Centennial should have focused upon it the attention not only of the marine, but the industrial world.

When once steam was known as a mo-

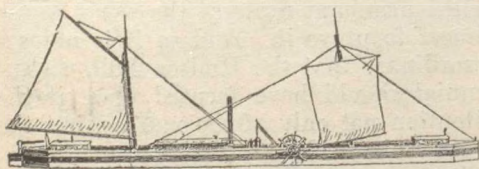


CONSTERNATION AT THE SIGHT OF FULTON'S MONSTER

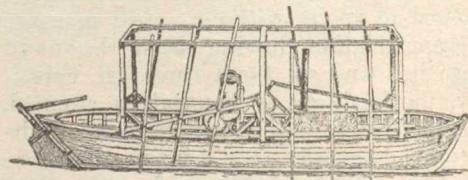
tive power its application to navigation was obvious enough, but it remained for Fulton, nevertheless, to first utilize it successfully in this way. The story of the attempts which preceded the final triumph of Fulton's "Clermont" are nevertheless of intense interest and lose nothing through the fact of their unsatisfactory results.

The first attempt to propel ships by steam was made as far back as 1543, when a Spanish captain, Blasco de Garay, exhibited in the harbor of Barcelona a steamboat of his own design. It is more than likely, however, that Blasco's engine was on the principle of the Aeolipile of Hero, invented 130 B. C., in which steam produced rotary motion by issuing from orifices, as water was utilized in some ancient mills. But with the hazy experiments of Blasco de Garay the story of the steamship is lost in a maze of uncer-

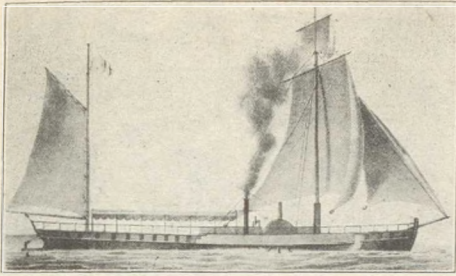
tain facts for over two centuries, in which time steam itself, as a power of any kind, underwent many ridiculous tests. But the most surprising thing, in the light of present development, is the fact that thirty years should have elapsed—between 1777, when the steam engine had become in Watt's hands an efficient power for other purposes, and 1807, the date of Fulton's first voyage—before a really serviceable steamboat was produced. The connecting link in this queer circumstance seems to lie in the use of revolving paddles instead of oars, which satisfied the scientifically inclined until 1736, when Jonathan Hulls took out in England a patent for a tow-boat to be propelled by a paddle-wheel, set in motion by a crude "steam engine." This project, however, was never executed. The next attempts along this line were executed on the



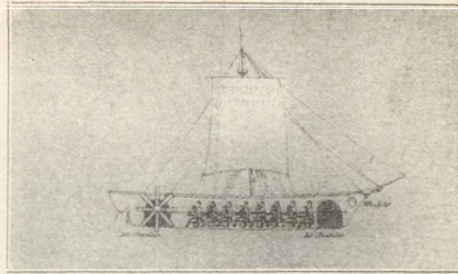
Model of the Clermont



Model of Fitch's steamboat



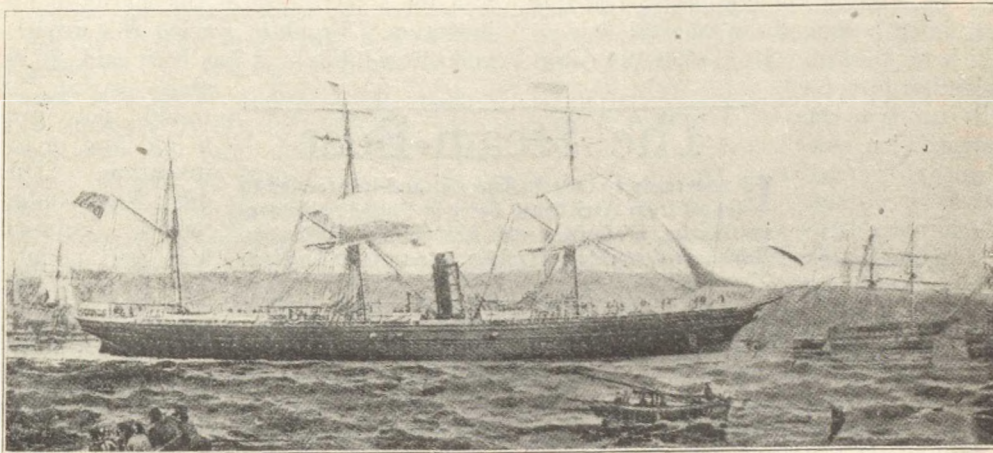
Paragon Steamboat



The Mute

Seine by Comte d'Auxiron in 1774 and Perier in 1775, but neither met with much success. In 1782, however, the Marquis de Jouffroy constructed a steamboat of considerable size which navigated the Seine for some time. But while this

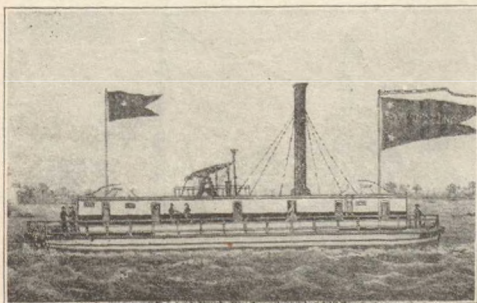
whose work a battle has always waged on the part of their friends and admirers, who have claimed steadfastly that to these men rather than to Fulton should go the credit for the invention of the successful steamboat.



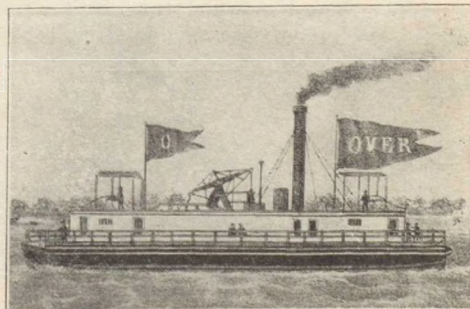
"Russia," 1867

vessel far surpassed its predecessors, it was still woefully lacking in power. A year later, in 1783, experiments also were inaugurated in America by John Fitch and James Rumsey, two men around

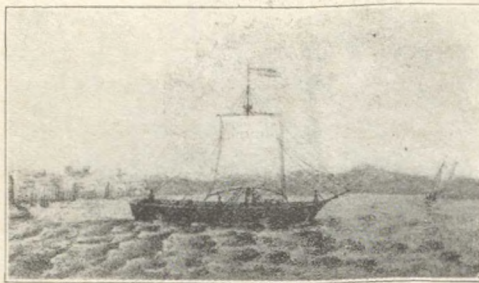
In some ways public records, historical documents and family histories seem to prove the justice of the contention, and at any rate a great share of the ultimate triumph of steam as a motive power



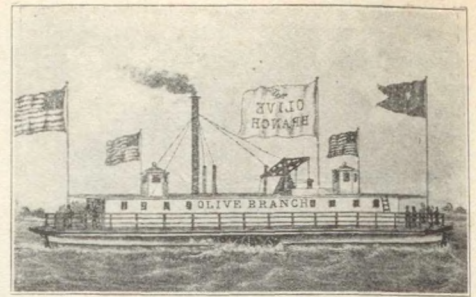
Fulton Ferry Boat, "William Cutting," 1827



"Over," 1840



"The Nautilus," 1827



"Olive Branch," 1836

should and must be traced back to these pioneer inventors. It was not until 1785, however, that Fitch began seriously his experiments with steam. His first idea was to apply the power to "land carriages," but he quickly dismissed this plan in favor of the steamboat, realizing at this early date the wonderful field in which he worked. Soon after his determination to apply his energy to the transmission of steam as a motive power for vessels Fitch sent a letter to Congress, asking assistance. In the meantime, he made an initial trial of a model with paddle wheels. The letter was referred to a committee, which made no report; and so Fitch tried other means of securing backing. But, failing in these efforts, he appealed directly to James Madison, who finally presented a petition in his behalf to the legislature of Virginia. Patrick Henry, then governor of Virginia, expressed deep interest in the plan and when the legislature failed to render assistance he personally took

Fitch's bond for \$1,750, stipulating that within nine months thereafter Fitch should operate a steamboat. The plan, however, fell through. Fitch had hoped Benjamin Franklin would give his patronage and went to Philadelphia to ask him for a certificate of the merits of his invention. Franklin evaded this request and offered Fitch, it has been said, \$6 as

alms, saying he would not give to aid him in his invention. This offer Fitch indignantly refused, and learning afterwards that Franklin was at the time working on a similar invention himself,

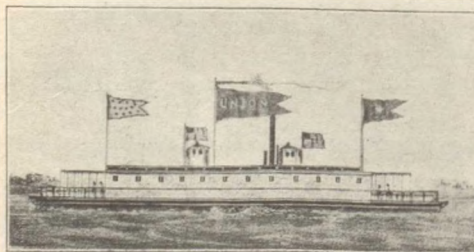
he became temporarily discouraged.

Fitch next sought out Arthur Donaldson of Philadelphia, who showed interest in Fitch's model. But Fitch again lost his faith in human nature when he discovered soon after that Donaldson was about to apply to the Legislature for the exclusive right to the navigation of vessels by steam and fire in the waters of

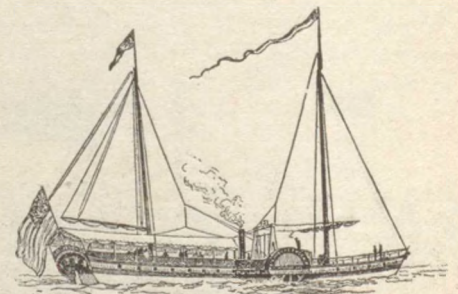
The Steam-Boat

IS now ready to take Passengers, and is intended to set off from Arch Street Ferry in Philadelphia every Monday, Wednesday and Friday, for Burlington, Bristol, Bordentown and Trenton, to return on Tuesdays, Thursdays and Saturdays—Price for Passengers, 2/6 to Burlington and Bristol, 3/9 to Bordentown, 5s. to Trenton.
June 14. to. th stf

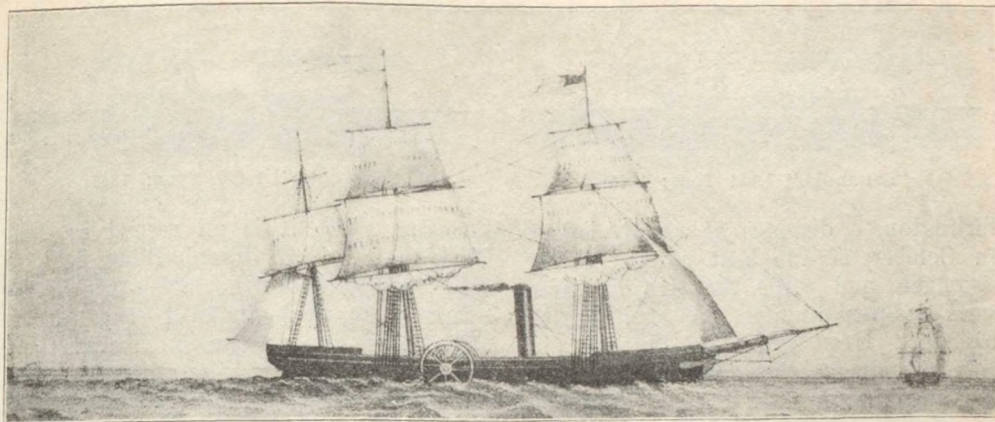
Announcement of First Passenger Steamboat



Fulton Ferry Boat, "Union," 1836



Phoenix

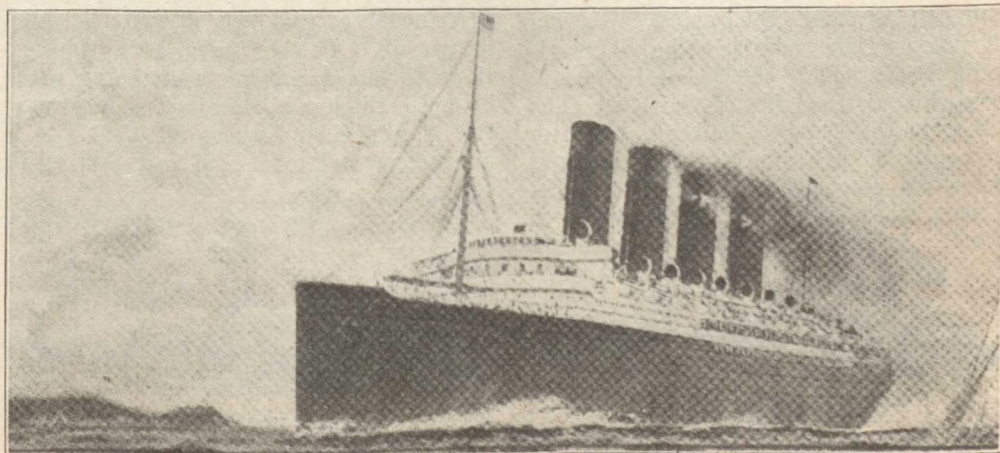


The First Ocean-Crossing Steamship—"The Savannah"

Pennsylvania. Fitch coped with this, however, by immediately presenting in both the Pennsylvania and New Jersey legislatures a similar petition which passed both bodies and obtained for him the exclusive rights for fourteen years. Soon after this Fitch allied himself with Henry Voight of Philadelphia, and in July, 1796, tried experiments on a skiff with a screw of paddles, the endless chain and one or two other modes. The experiments were unsuccessful. Much disheartened by his numerous obstacles Fitch wandered around aimlessly for a time in a state of despondency. An idea suddenly struck him, however, which he thought would solve the problem, and once again he sought out Voight. The scheme this time was propulsion by oars worked with steam power. Fitch tested

the plan on July 27, 1786, and it worked with apparent success. A company was now formed and in August of 1787 the first test was made with a large boat. It went discouragingly slow, although those present were well satisfied that the trial had at last demonstrated that a boat might be moved by steam.

It was soon after this that James Rumsey, of Virginia, announced that he had invented a steamboat. The matter was brought by Fitch before the Virginia Legislature, and the latter was sustained. Various experiments and trials were made until 1788, when Fitch made a new venture by placing the propelling oars at the stern. At the official trial, in July, the pipe boiler sprang a leak. In October, however, the steamboat made several voyages between Philadelphia and



The Lusitania—45,000 Tons—One of the Modern Ocean Greyhounds

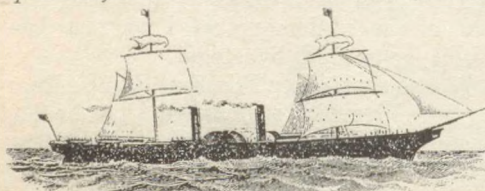


"Britannia," 1,154 Tons; 1840



"Hibernia," 1,400 Tons; 1843

Burlington, a distance of twenty miles. On October 12 the boat carried thirty passengers and made the trip in three hours and ten minutes. A certificate of this fact is in existence. Interest in Fitch's company, however, fell off after this and the inventor became destitute. His condition was made even more pitiable by the attempts of Rumsey and his friends to discredit Fitch's work. The latter, however, was indefatigable, and by August, 1789, had a new boat ready for trial. Trouble then arose with the condensers and delayed the trial trip until April 16, 1790. This test was so suc-



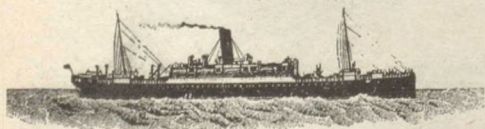
"Scotia," 3,871 Tons; 1862



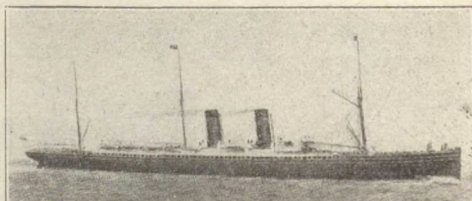
"Russia," 2,960 Tons; 1867

cessful that on June 16 the Governor and Supreme Council of Pennsylvania made a trip. A speed test showed that the vessel made eight miles an hour. Fitch's steamboat was then placed in regular commission as a passenger boat between Philadelphia and Burlington, stopping at intermediate points. The Pennsylvania Packet and the Federal Gazette printed advertisements of the boat. The vessel, before she was laid up, had run an aggregate of almost three thousand miles—an eloquent rebuttal of the historians who have given little credit to Fitch. As further proof of the evidence

injured that further efforts upon her that year were abandoned. Aaron Vail, Consul at L'Orient, made proposals to Fitch in 1791 for an interest in the steamboat, with the view of obtaining patents in France and other parts of Europe. An agreement to this effect was, in fact, drawn up. In the meantime applications for local patents were being made by both Fitch and Rumsey. They were finally issued on August 26, 1791. It is a generally acknowledged fact that while



"Slavonia," 10,605 Tons



"The Umbria," 1885

TWELVE STEPS IN THE GROWTH AND



"Asia," 2,226 Tons; 1850



"Persia," 3,300 Tons

Vail was thus in possession of Fitch's plans Fulton studied them carefully and gained his first ideas from them. In 1793 Fitch went to France to take up the patents abroad with Vail, but the French were agitated at the time with the troubles of the revolution, so Fitch crossed the Channel to England, leaving his papers with Vail. Nathaniel Cutting, John D. Dickinson and Noah Webster, in letters reproduced in Westcott's "Life of John Fitch," tell of Vail allowing Robert Fulton and Chancellor Livingston to examine the papers of Fitch, containing his scheme for steam navigation. Returning

where the Tombs Prison in New York city now stands. The boat was moved by a screw propeller and was the first experiment ever made of this kind. It was not considered a success, however, for the craft failed to attain the desired speed. A working model of this boat is still on exhibition in the rooms of the New York Historical Society. Fitch, by this time, had lost hope of obtaining aid and drifted, heartbroken, to Kentucky, where he occupied his last days—which ended so tragically—in minor experiments. His last labor, in fact, was the construction of a model boat three feet in length,



"Gallia," 4,808 Tons; 1879

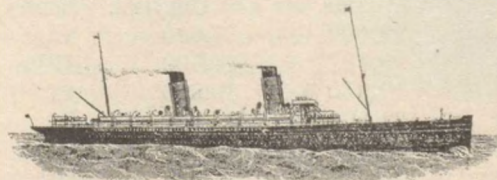


"Etruria," 8,127 Tons; 1884

to America in 1794, Fitch landed in Boston in poor health and in destitution. He worked for several years in an apparently futile endeavor to obtain cooperation in further attempts to perfect his steamboat. It has been said that Chancellor Livingston at this time told Fitch he was willing to invest if Fitch could build a boat that would average eight miles an hour. Fitch constructed new but crude machinery, which he installed in a common yawl, and made several public tests in the Collect Pond,

which, it is believed, is still in existence. The machinery of this model was constructed of brass, and it was fitted with side wheels. The inspiringly courageous and yet tragic story of the life of John Fitch was brought to its close by his own hand soon after, the inventor succumbing in July, 1798, when in his fifty-sixth year.

But, in his day, Fitch far surpassed in both theory and execution the other inventors contemporary with him. Rumsey, his most ardent rival, had, for instance,



"Campania," 12,950 Tons; 1893



"Caronia," 21,000 Tons

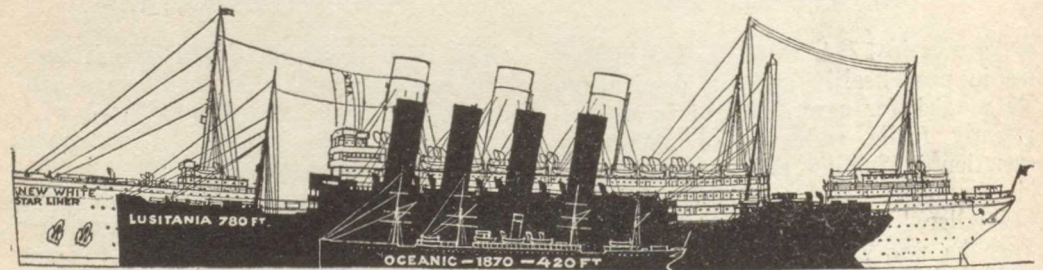
DEVELOPMENT OF THE OCEAN LINER

only progressed far enough to conceive the idea of propelling a vessel by means of water issued with force from its stern, an attempt that failed signally.

Meantime, however, in Europe and especially in England, much experimenting had been done by various inventors—a majority of whom antecede Fitch. Messrs. Miller and Taylor of Edinburgh were pioneers among this group of inventors. The experiments of these men took place on a small lake in Mr. Miller's estate in Dumfriesshire. A small engine having four-inch cylinders of brass was prepared, under the superintendence of Mr. Taylor, tutor in Mr. Miller's family, and Mr. Symington, an ingenious mechanic. This device was fitted on board a double-boat, with a paddle-wheel in the interspace. The trial took place amid a concourse of hundreds on October 14, 1788, and with perfect success. The next year Mr. Miller had larger engines fitted into a vessel and tried on the Forth and Clyde Canal, when the vessel moved at the rate of seven miles an hour. Partly from his own volition and partly from financial reverses Mr. Miller was diverted from pursuing the matter farther, but in 1801 Mr. Symington took

out a patent for the construction of steamboats, and in 1803 built the Charlotte Dundas, to tow vessels on the Forth and Clyde Canal. The success seems to have been complete, excepting in one respect, that the agitation of the water by the paddles was found to wash down the banks in an alarming manner. The use of the vessel was therefore given up for many years.

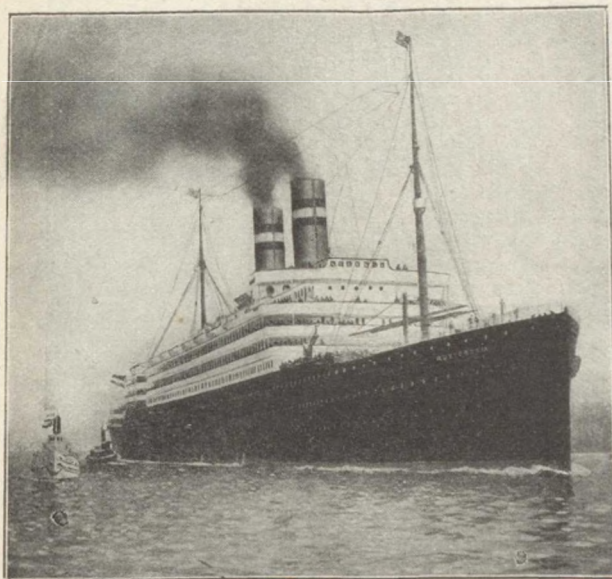
It is interesting to note, however, that Robert Fulton, a short time later—traveling into Scotland—visited the unfortunate "Charlotte Dundas" and obtained drawings of the machinery. Going back to America and before taking up the work of Fulton, it is found that James Stevens, becoming interested in the work of Fitch on the "Collect," built a propeller boat in 1804—a small open vessel propelled by steam—and later successfully petitioned the State of New York for exclusive rights upon its waters. This vessel was so successful in every way that he soon after built the "Phoenix," a vessel which, however, was not finished until after the trip of the original "Clermont" down the Hudson River. But, Fulton having in the meantime won the right away from Stevens to navigate on



COMPARATIVE TABLE SHOWING GROWTH OF VESSELS

Name.	Date.	Length, Feet.	Displacement, Tons.	Horse Power Indicated of Engines.	Speed, Knots.
Great Eastern.....	1858	692	28,000	7,650	12
Umbria	1885	500	8,127	14,500	19½
Campania	1892	620	12,950	30,000	22
Kaiser Wilhelm der Grosse.....	1897	649	21,000	31,000	23
Deutschland	1900	662	23,600	37,500	23.5
Kaiser Wilhelm II.....	1903	706	26,000	38,000	23½
Adriatic	1907	725	38,000	40,000	23
Lusitania	1907	785	45,000	68,000	25
New White Star Liners.....	1910	890	60,000	21

the waters of New York State, the latter placed his boats on the Delaware and Connecticut rivers, where they earned great praise for their uniformly good



The Rotterdam

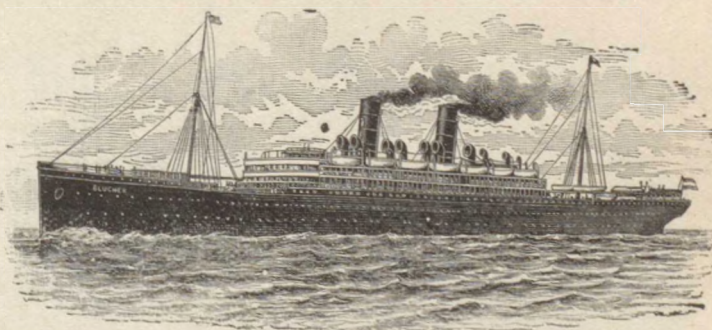
performances. The only other inventor of consequence in this period was Oliver Evans, who ran a steam scow on the Delaware River with more or less success.

Coming through the successive steps in the evolution of the steamboat the next important character that looms up is Robert Fulton himself—the miniature painter, who was diverted by opportunity's call into the greatest inventor of his age. Fulton was a native of Little Britain, Pennsylvania, and his peculiar genius manifested itself at an early age in an irrepressible taste for producing drawings of various mechanisms. At the age of twenty-one he was intimate with Franklin. Previous to this, however, he had painted portraits and landscapes in Philadelphia, from which he gained considerable pecuniary profit. At this age Fulton sailed for England, with the view of seeking Mr. West's aid in the further

prosecution of his art. That great painter took him into his family at once, but, whether of his own volition or by a fascination over which he had no control,

Fulton was quickly drawn toward the problem of steam navigation, and—in 1793—became actively engaged in a project to improve inland navigation. Even at that time he had conceived the idea of propelling vessels by steam, and by 1804—having carefully studied the plans of Fitch and those of the "Charlotte Dundas" in Scotland—he had acquired much valuable information upon the subject, which he wrote up in the form of notes. Some of this matter Fulton sent to America, but a larger part of it was lost, owing to the wrecking of the vessel to which it had been intrusted. But Fulton had not given steamboats his sole attention. On the contrary, the versatility of the man can best be shown when it is stated—aside

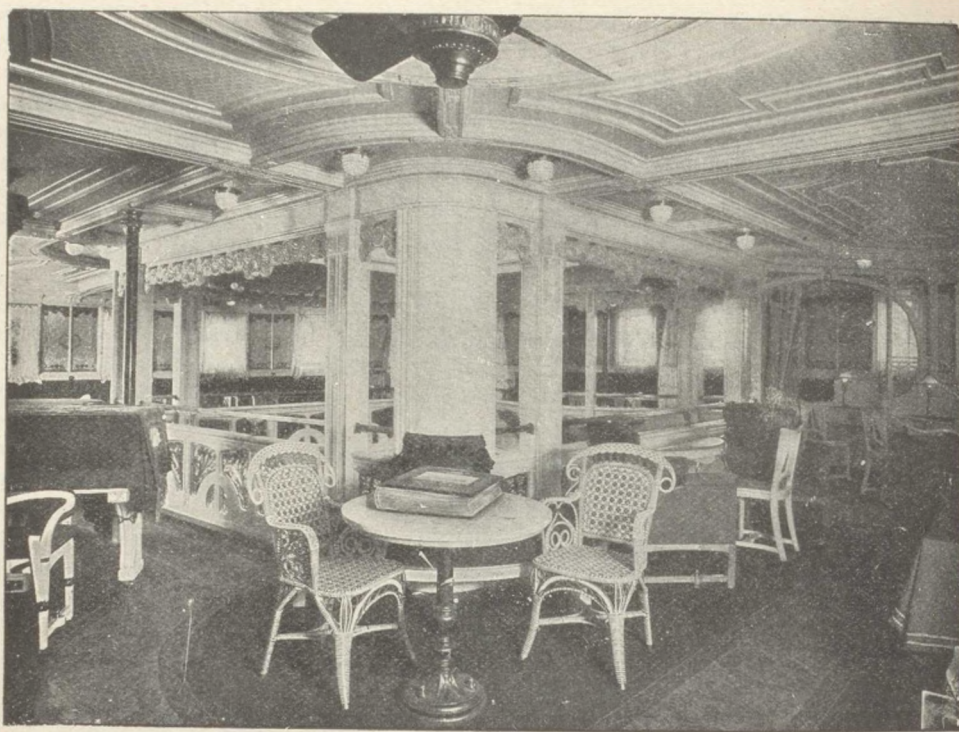
from his art work—he had in 1794 been engaged by the Duke of Bridgewater in canal projects, had adopted and patented the system of inclined planes as a substitute for locks, and had written a treatise on canals. He had also invented a mill for sawing marble, patented several methods for spinning flax and making ropes, and constructed a torpedo (which he always considered his greatest invention) for the purpose of destroying the



The Blucher

enemy's vessels in time of war.

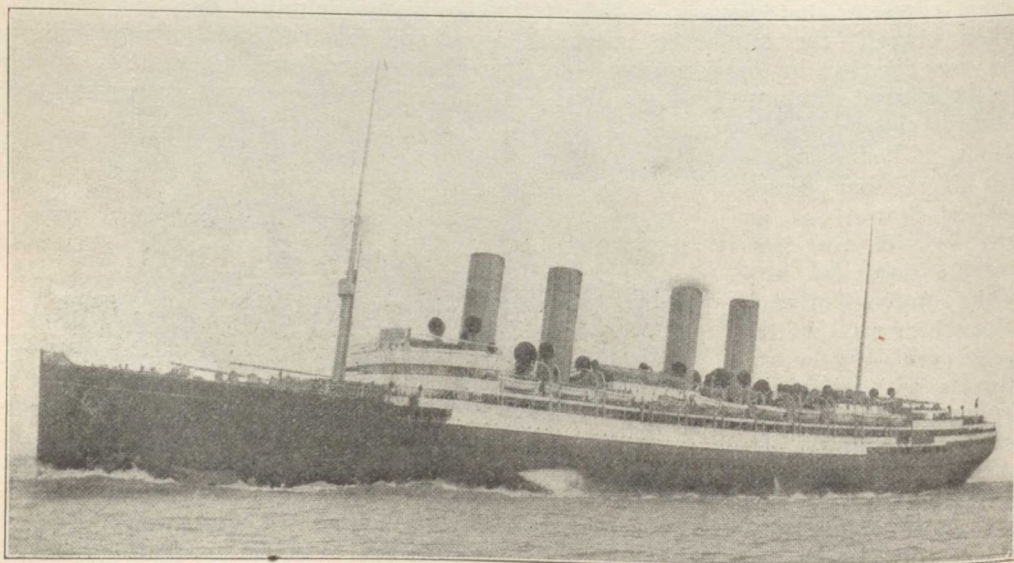
At what time Mr. Fulton's mind was first directed to steam navigation is not definitely known; but even in 1793 it is



Ladies' Cabin Aboard The Blucher

known that he had matured a plan in which he had great faith. While in Paris, however, Mr. Fulton came in close contact with Chancellor Livingston, an enthusiast on the subject of steam navigation, who had himself made experi-

ments along this line as early as 1798. The two quickly became fast friends and worked together on the building principles of a steam vessel which they had in mind. In the practical side of the work, however, Fulton soon took the initiative

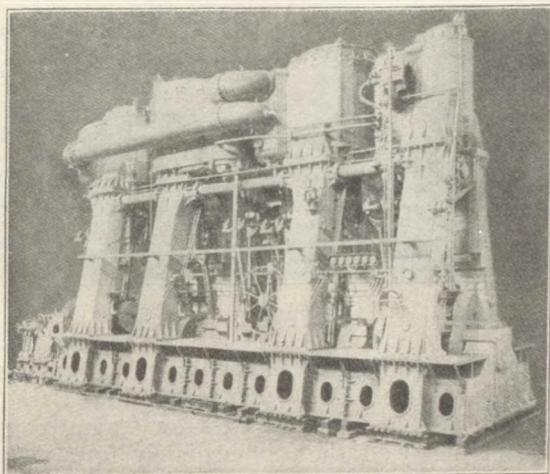


The Deutschland

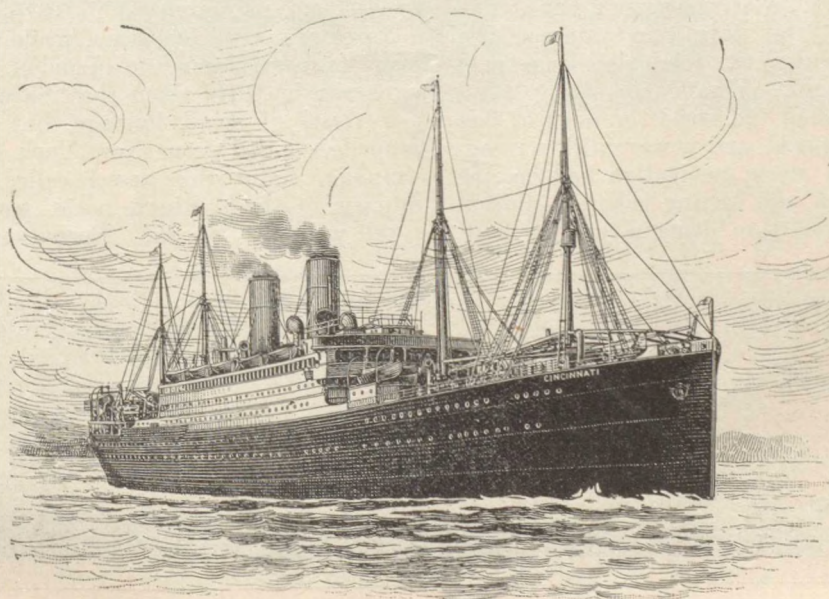
and drew many plans—so daring and original as to startle the more conservative Livingston. Both made careful studies of the shortcomings of their predecessors, but the bulk of the actual creative work was left entirely in the hands of the brilliant Fulton. Returning to America in 1806, they immediately engaged in putting their plans into execution and commenced the building of a boat which was then thought to be of immense size for its acknowledged purpose of navigating the Hudson River. This boat, no less than the famous "Clermont," was of one hundred and sixty tons burden, one hundred and thirty feet long, eighteen feet wide and seven feet draught. The diameter of the paddle-wheels was fifteen feet, the boards four

feet long and dipping two feet in the water. She was, indeed, a queer looking craft, and while on the stocks excited much attention and a great deal of ridicule. When she was launched and the steam engine placed in her, that also was looked upon as an absurd bit of mechanism concocted by a crank. The result was that when the announcement was finally made that the "Clermont" would "start from Cortland Street at six and one-half o'clock on Friday morn-

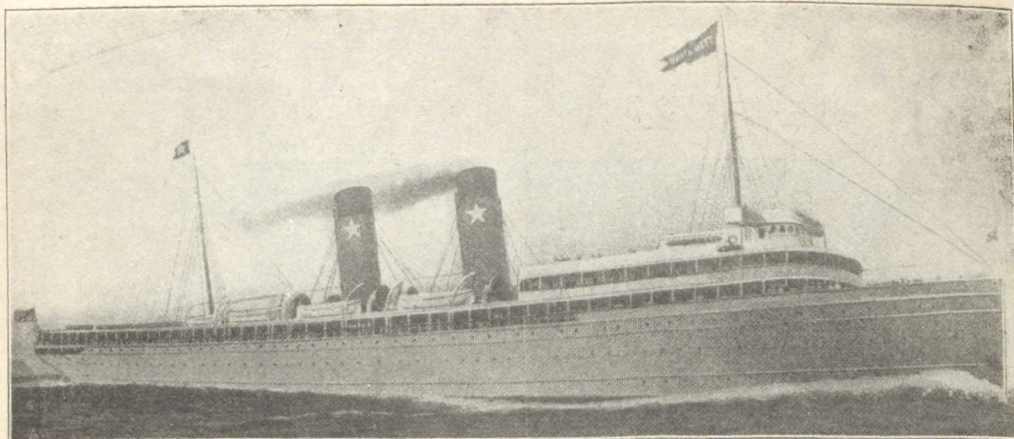
ing, the fourth day of August," there were more jeers awaiting her departure than had been sounded in New York for many years. Nevertheless, when the time came for its departure there were a number of people willing to "risk their lives" on the odd creation. There were twelve berths,



One of the Engines of an Ocean Liner



The Cincinnati



Type of Great Lakes Passenger Boat

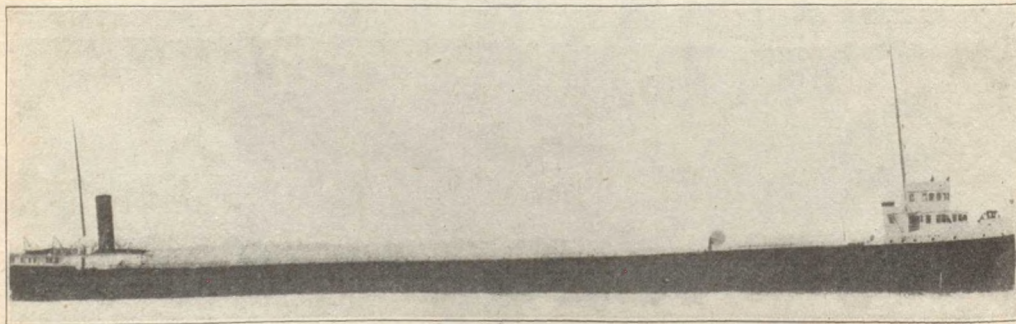
and every one was taken through to Albany. The fare was seven dollars. All the machinery was uncovered and exposed to view, and the periphery of the balance wheels—of cast iron, some four or more inches square—ran just clear of the water.

But, notwithstanding the skepticism that had been felt, it was quickly seen, once the engines were under headway, that the success of the "Clermont" was assured, and, as a result, by the time the memorable voyage had been completed and the vessel had reached Albany, the jeers of the early morning had changed into an ovation of widespread scope. The "Clermont" on this trip averaged five miles an hour, the total time consumed being thirty-two hours.

Throughout the world the news of this triumph spread, and it was quickly recognized that steam navigation had become a thorough and lasting success. Fulton became greatly in demand, and he built

ferry-boats to run across the North (Hudson) and East rivers, as well as vessels for several companies which were immediately formed in different parts of the United States. He also became famous through the construction of the "Demologes," the first war vessel ever propelled by steam. Later—after Fulton died—this vessel, deemed a marvel at the time, was named "The Fulton First," and was used as a receiving ship until she was accidentally blown up in 1829.

The first voyage of length—following Fulton's triumph—which was attempted by a steamboat, occurred in 1815, when a vessel, propelled by steam, made a passage from Glasgow to London. The next was in 1818, when the "Savannah"—a vessel of small tonnage, but steam propelled—plied from New York to Savannah. Later this vessel called at a number of the southern ports, receiving royal welcomes at all. Encouraged by



Type of Lake Freighter—10,000 Tons

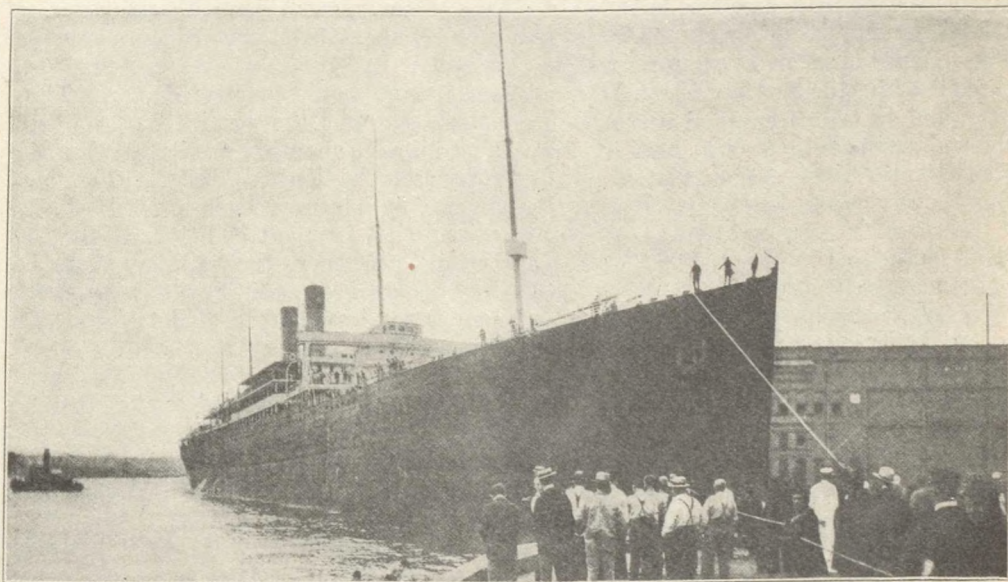
this success the owners of the "Savannah" sent the ship abroad, and for several months she toured the ports of Europe. Here her reception assumed the proportions of a great ovation, and the learned men of the day vied with royalty in honoring the "Yankee Steam Devil." Returning, the "Savannah" again crossed the Atlantic, so that to her must go the honor of being the first ship to cross the ocean under her own steam. In 1820 steam-packets were established between Holyhead and Dublin, while several coast lines were inaugurated in the United States.

In the following year the steam-pro-

into a big ship and go out to sea with her.

Next to the trip of the "Clermont" and the earlier triumph of Fitch, the events of the year 1838 form the most memorable chapter in the history of steam navigation. It was in this year that the commerce of Europe and America was first linked together by means of the steam-propelled ship, a vessel that was destined to serve a high function in the building not only of America but of all the nations of the world, which had hitherto been widely separated owing to the poor means of transportation existing between them.

On the 4th of April of this year



The "Celtric" at Her Wharf, New York

peller was first given serious attention when Mr. Robert Wilson made and exhibited working models of a vessel propelled by a screw, and for several years after his schemes were before a number of public bodies in Scotland. The successful introduction of a propeller with several separate blades, the form later universally used, is claimed for Mr. Lowe, Mr. Henry Wimshurst and others, although Sir Francis Pettit Smith's propeller in the "Archimedes"—while having but one blade and being speedily abandoned—will undoubtedly continue to give a lion's share of the honor to him, he being the first person to put the screw

(1838) the steamer "Sirius" sailed from Cork, and the "Great Western" from Bristol four days later. Both vessels arrived safely at their destination—New York—on the 23d, the "Sirius" being only fifteen hours ahead of its rival. So successful, however, were these trips that others were quickly contemplated.

Even before these two vessels had crossed the Atlantic on their initial voyages, Samuel Cunard, of Halifax, Nova Scotia, who was an owner of sailing vessels trading from Boston and Newfoundland to Bermuda, had dreamed of a regular dispatch line of Royal Mail steamships across the Atlantic, which should

displace the uncertain service of Government brigs, to whose luckless care the mails were at that time entrusted, and which occupied six or seven weeks on the voyage. And so, when the British Admiralty, seeing the success of the "Sirius" and "Great Western," finally advertised for a contract service to carry these mails, Mr. Cunard realized that his long-hoped-for opportunity had come. Consequently he went to England to prosecute his scheme, and was introduced to Mr. George Burns and his partner, Mr. David McIver, ship-owners also, who saw very quickly that he was no mere dreamer, but a keen, far-sighted business man.

They helped him in every way and secured for him the necessary financial support, and to the energy and initiative of these three men the world owes its first transatlantic line. From that time to this its service has been uninterrupted.

The first of the Cunard vessels to cross the Atlantic and the first of its fleet to be built was the "Britannia," a dwarf ship in comparison with the smaller vessels of today. This vessel was built in 1840 and started on her maiden voyage on the 4th of July, 1840, her average speed on the voyage being 8.5 knots per hour on a coal consumption of 38 tons per day. The "Britannia" was 207 feet long, 34 feet 4 inches beam, 24 feet 4 inches depth, with a tonnage burden of 1,154 and an indicated horsepower of 740. Her cargo capacity was 225 tons, and she was fitted for the accommodation of 115 cabin passengers, but no steerage.

The same year (1840) witnessed the founding of the Wilson Line, the other pioneer company in the Atlantic trade. In 1843 the fleet of the Cunard Line was increased by the construction of two more ships, the "Hibernia" and the "Cambria." These vessels were sister ships, and while not much larger than the "Britannia" were great improvements on the older ship. They were 210 feet long, 35 feet 9 inches beam and 24.2 feet depth. Their indicated horsepower was 1,040 and their tonnage 1,422 tons, with an average speed of 9.25 knots.

The next important step in the growth

of the transatlantic steamship is the birth of the Hamburg-American Line—the first of the German companies—on May 27, 1847. The company began with a capital of only \$112,000, and from this insignificant beginning has grown to such magnitude that to-day the company's fleet comprises 387 vessels, with a total tonnage of almost a million. The entire fleet of this pioneer German line at first consisted of three sailing vessels, of which one, named the "Deutschland," was the first to make the trip from Hamburg to New York under the German flag. She was a square-rigged three-master, of about 717 tons. Steam power was



adopted in 1855, when the first two steamships were contracted for. These vessels entered the service in 1856 and maintained a monthly service between Europe and the United States. This new service by steam vessels proved so successful that frequent additions to the fleet became necessary, the sailing vessels being disposed of, and by 1867 the company's service was operated by ten large transatlantic steamers. A weekly service was established in 1872 and the operations of the line extended to the West Indies, Mexico and the Spanish Main.

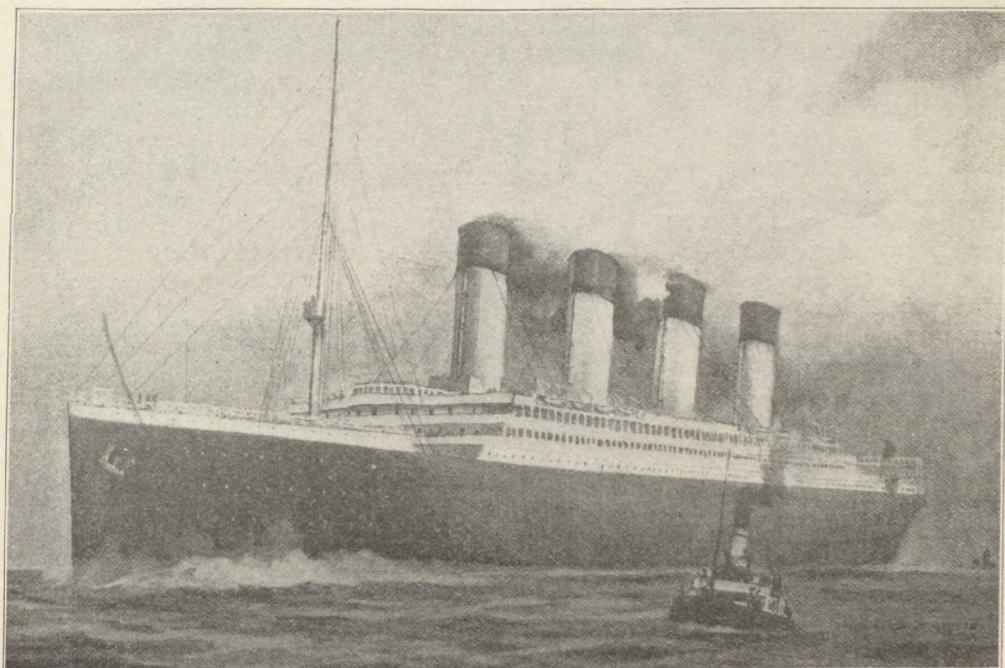
In 1850 the "Asia," a marked improvement in transatlantic steamships, was constructed for the Cunard Line. This vessel, although structurally like her predecessors, was of larger size and correspondingly greater engine power, being 266 feet in length, with a tonnage of 2,226.

Two years later—1852—the fourth of the great Atlantic lines came into being with the foundation of the Anchor Line, which, starting in modestly, soon assumed large proportions and created a great fleet of vessels in regular service.

In 1857 the fleet of ocean vessels was further augmented by the organization of the North German Lloyd Company. This now stupendous undertaking was the creation of Capt. H. H. Meir. The company was organized through the consolidation of four smaller companies. The capital of the newly organized company amounted to \$2,357,000. During the

first year a line was operated to England with the three small steamers, "Adler," "Mowe" and "Falke." For the line to New York four large screw steamers had been ordered in England and Scotland. On June 19, 1858, the "Bremen," as the first of the new steamers, left the Weser on her maiden trip to New York, carrying 150 tons freight, one cabin and ninety-three steerage passengers. In the course of the same year the other three vessels, the "Weser," "Hudson" and "New York," were installed by the com-

time, and so far in advance of engine-building progression that she was doomed to failure. Although commercially a failure, there being neither sufficient passengers nor freight traffic to keep her regularly employed at a profit, the later trend of shipbuilding has shown that Brunel was correct, both theoretically and in his constructive methods. In Brunel's day the "Great Eastern" was too big for the time. But now that the world's trade has developed sufficiently to warrant its construction, the big ship is found to be



The Proposed White Star Liner, "Olympic"—60,000 Tons

pany, and a regular fortnightly service was established, which won for the company, the next year, the contract for carrying British and American mails. Almost coincidentally with the establishment of the North German Lloyd was the organization of the French Line, with a fleet of fine side-wheel steamers, the equal of any then afloat. It marked also the first line of transatlantic vessels to fly the French flag.

But the greatest event toward the close of this second decade of steamship development was the construction of the "Great Eastern," a vessel far in advance of the

the most profitable. The greater the size of the ship, the less the cost of carrying a ton of freight a given distance. Moreover, in his construction, Brunel antedated our modern shipbuilders by using the cellular system of construction and steel decks. He was the first to introduce the longitudinal girder method, which, during the past few years, has been reintroduced by many naval architects with a view to securing a stronger construction and one better adapted to meet the stresses to which a ship is subjected in a seaway. Mr. Brunel's name, however, together with that of his coworker, Mr.

Scott Russell, will find fitting places near the top of the ladder of naval progress. A short description of the "Great Eastern" cannot fail to be of interest. With one or two exceptions the vessel was an extended copy merely of all other iron vessels built on the wave-line principle. The ship, nevertheless, was colossal in size, and it is hard to see, even at this advanced age, how Mr. Brunel, in a period of small iron vessels and inadequate engine power, had the temerity to carry into execution his progressive ideas. The "Great Eastern" was 692 feet in length, 83 feet in beam, 58 feet in depth and of 28,000 tons normal displacement. Her combined paddle-wheel and screw engines drove her at a maximum speed of 14.5 knots, and a sustained sea speed of about 12 knots. The paddle-wheels were 56 feet in diameter, and their weight 185 tons. The screw propeller, which was 24 feet in diameter, was by far the largest ever made. Its four blades were cast separately, the total weight of the screw being 36 tons. The propeller shaft for moving the screw itself was 160 feet long and weighed 60 tons. The after length of this shaft was 47 feet long and weighed 35 tons. In the matter of accommodations the "Great Eastern" was designed to carry 800 first-class, 2,000 second-class and 1,200 third-class passengers. For the accommodation of these guests luxurious cabins and drawing rooms were built, the "Great Eastern" being a distinct advance in this line. The first trip of the huge ship was begun on June 17, when the vessel passed the Needles en route to New York, where she safely arrived on June 28. The arrival of the vessel created the greatest excitement throughout America. Business was generally neglected and multitudes of people thronged the wharves and roofs in order to get a glance at the monster. But wonderful as was the "Great Eastern," it was still not a success and marked one of those queer chapters in history when invention and science anticipated the times. But that the great vessel was destined to occupy an

important place in the world's history was further proved when, after repeated failures by other ships, the "Great Eastern" successfully laid the first Atlantic cable a few years later.

About the time when the "Great Eastern" was making her initial trips across the Atlantic the advantages of the screw propeller as a means of propulsion were receiving increasing recognition, and the "China," built in 1862, was the first of the new ships built with this end in view. In the same year the "Scotia," the last of the side-wheel steamers, was built by the Cunard Line, and was acknowledged to be the finest mercantile vessel afloat.

The "Scotia" broke all Atlantic records, performing the voyage from Liverpool to New York in eight days and twenty-two hours. But the advent of the "China," soon after, placed the performances of the Cunarder in the background and set all of the transatlantic companies to work building screw-propelled vessels. The "China" was 337 feet in length and maintained



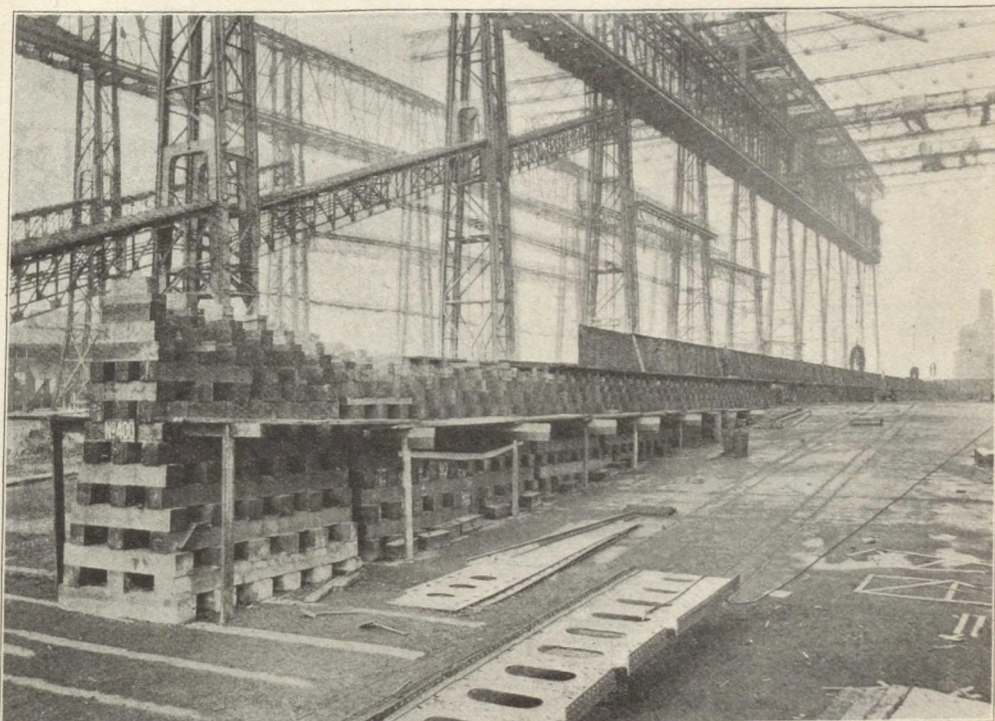
a sea speed of about 14 knots. The "Russia" of the Cunard Line (1867) was another improvement upon the predecessors, and was probably the most beautiful vessel that had been seen up to that time. Her commander, Captain Cook, navigated this vessel 630,000 miles on the Atlantic in all weathers without accident or breakdown of any kind. In the meantime the German and French lines were making equally as rapid progress in the building of their fleets, and several great vessels were turned out in the various shipyards for the service of these lines. In 1867 the North German Lloyd invaded the American field still more by inaugurating a direct line to Baltimore and attaching several ships to this route.

The next ten years witnessed rapid development not only in the steamship itself but in the construction of marine engines. As a result in 1879 the "Gallia" was built by the Cunard Line along the latest and most scientific lines. This ship was one of the first to be driven by compound en-

gines, an invention that utilized steam at a far higher pressure and produced equal or better speed results on a much smaller consumption of coal. She was the first vessel for the Atlantic service to exceed 400 feet in length, her total length being 430 feet. The tonnage of the "Gallia" was 4,808 and her indicated horsepower 5,300, from which she developed a speed of 15.5 knots per hour.

In the meantime, however, several large transatlantic lines had been inaugurated, which brought the commerce of the At-

acknowledged that this new type had "come to stay," and since that time few ocean liners have been built on other designs, so far as the internal arrangements of the passenger quarters are concerned. Three years later (1873) saw the inauguration of the first fleet under the American flag, when the Red Star Line was established, and a year later the Holland-America Line was founded and added its fleet to the transatlantic service. Along the same time the Allan-State Line was brought into being. The effect of the es-



View in the Belfast (Ireland) Shipyards, Where the "Olympic" Is Building
Showing the method of laying the steel keel

lantic Ocean to a flourishing condition. In 1870 the second of the great English lines had been founded by Mr. Thomas Henry Ismay. This line became known as the White Star, and its first vessel, the "Oceanic," commenced running in the Atlantic trade in the year 1871. The first "Oceanic," in a way, came as a revelation. She introduced the midship saloon, extending the whole width of the ship, giving both improved light and ventilation, and where the motion of the ship was felt at its minimum. It was at once

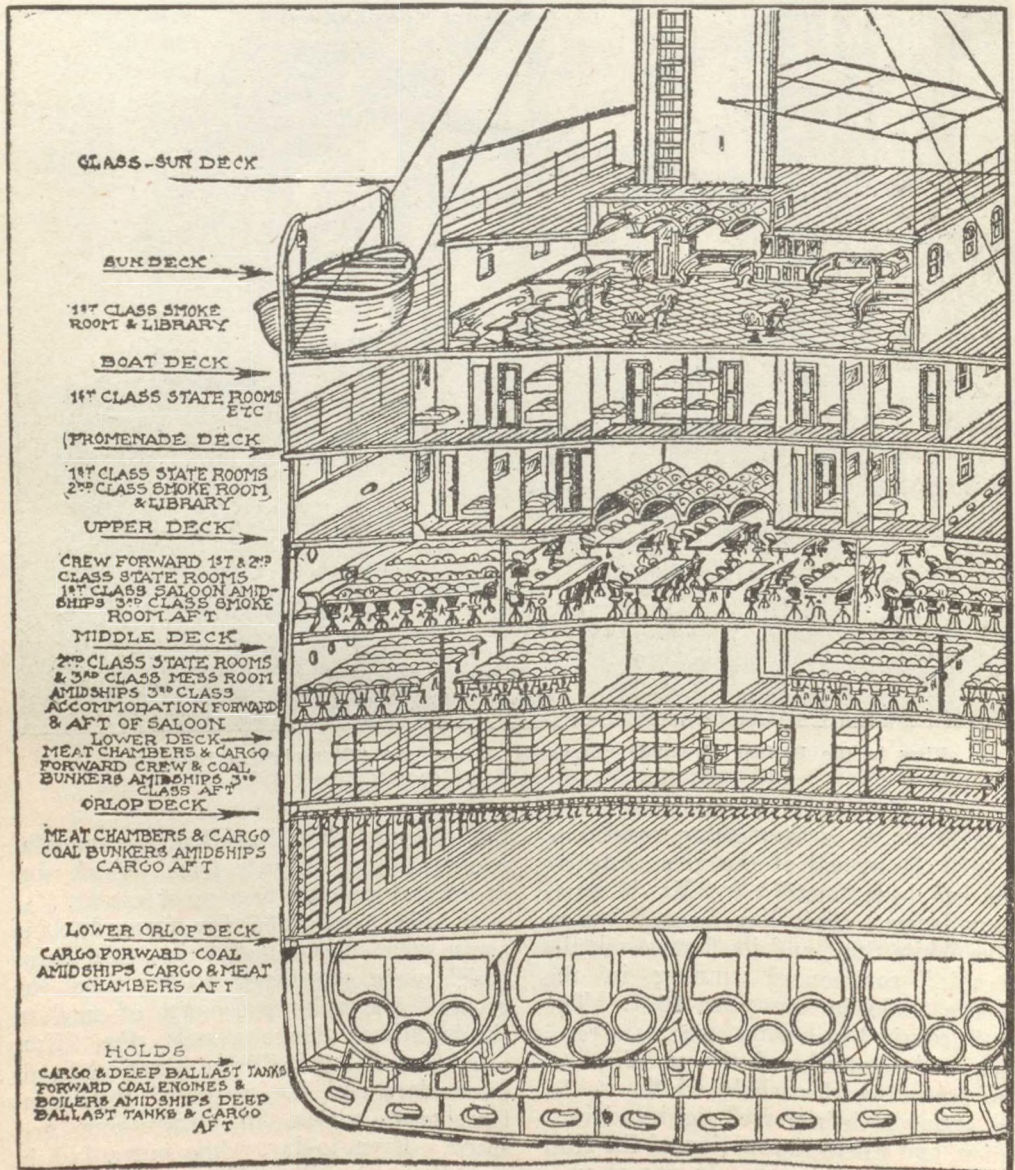
establishing of these lines had a wonderful result on the Atlantic trade, which was at once stimulated to a great extent.

In 1884 and 1885 the Cunard Line again went ahead and built two ships which were considered at the time the greatest triumph in the art of modern shipbuilding. These vessels, the "Umbria" and "Etruria," were identical in all particulars and far surpassed their contemporary vessels in dimensions and speed. Even to-day, while outranked in size, they are still good examples of ma-

rine construction and proof of the thoroughness with which they were built. These vessels were built by Messrs. Elder and were 500 feet in length, 57.3 feet beam and 40 feet depth, with a gross tonnage of 8,127 tons. They were five-deckers, the promenade deck, extending over the full breadth of the ship for nearly 300 feet amidships, being reserved for the first-class passengers. The compound engines of these vessels indicate upward of 14,500 horsepower, from which a speed of $19\frac{1}{2}$ knots per hour is developed.

These vessels quickly reduced the transatlantic speed record, the "Etruria" ultimately lowering it, in 1888, to six days, one hour and fifty-five minutes.

The next great vessel to be built was the "City of Paris," of the newly organized American Line. This vessel—now the "Philadelphia"—was built at the famous shop of Harland & Wolff, in Belfast, and was the first ship to bring this firm to the attention of the marine world. A sister ship, the "City of New York," followed soon after. These vessels were 560 feet

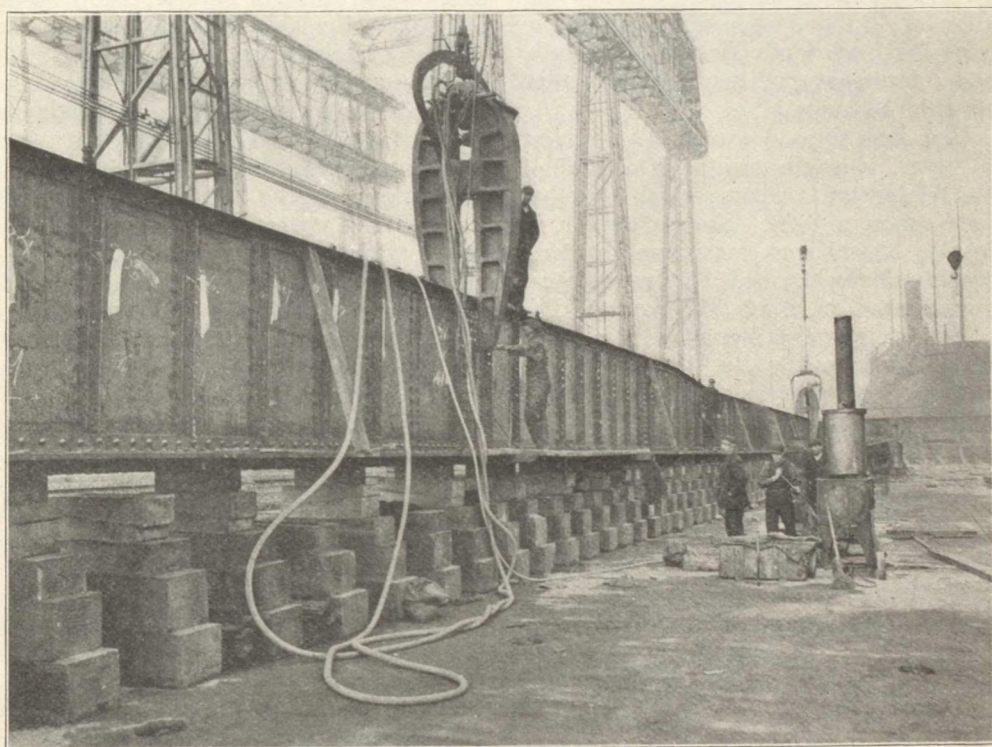


Cross Section of the Olympic and Titanic

in length and 63.3 feet beam and 42 feet depth. They were also unusually fast, and the "City of Paris" at once set about the lowering of the Atlantic record. This she accomplished in 1889, when she reduced the time of the "Etruria," the holder of the blue ribbon for speed, to five days, nineteen hours and eighteen minutes across the ocean.

Possibly the next great ships to be considered are the "Teutonic" and "Majestic," sister vessels, which were built by Harland & Wolff for the Cunard Line in

eral years. These were the "Campania" and "Lucania" of the Cunard Line, which were built by the Fairfield Company. These vessels once again increased the size of the ocean ship, and were considered, and are still, masterpieces of the shipbuilding industry. The dimensions of these ships were: Length over all, 620 feet; breadth, 65 feet 3 inches; depth, 43 feet; gross tonnage, 12,950. They were the first serviceable ships to exceed 600 feet. These vessels again lowered the record, making the run in 1894 in the



Electric Riveting Machine Being Used On the Keel of the "Olympic" at the Belfast Yards

1889 and 1890, respectively. These vessels again increased the size of the ocean steamship, being 585 feet long, with a gross tonnage of 9,984. As in the case of the "Paris" and "New York" these vessels were built with the idea of attaining increased speed. The result was that in 1891 the speed record was again broken, both the "Teutonic" and "Majestic" lowering the record by over an hour.

The next year—1892—saw the building of two more great ships, which held their own against "all comers" for sev-

fast time of five days, seven hours and twenty-three minutes. The "Lucania" was the first vessel to cross the ocean at a speed of over 22 knots, her engines of 30,000 horsepower driving her through the water at a speed a few years before believed impossible. Following the performances of these ships the German companies took the lead in the record smashing, although the American liners, "St. Paul" and "St. Louis," built in 1895 by the William Cramp & Sons Company of Philadelphia, upheld their own and es-

established many enviable records. These ships were as well the first of the American-built liners and overcame a prejudice that had existed against shipbuilding in this country. These ships, however, were not as large as the two Cunarders.

The first ship to surpass the mark set by the "Lucania" across the Atlantic was the "Kaiser Wilhelm der Grosse," 1897, of the North German Lloyd. This handsome vessel was the first to carry the four funnels which are now characteristic of fast ocean liners. She was 649 feet long, of 21,000 tons displacement, and her engines of 31,000 horsepower sufficed to carry her from Sandy Hook to Plymouth, under favorable conditions, at an average speed of 23 knots.

The first ship to exceed the "Great Eastern" in length was the "Oceanic" of the White Star Company, which made her appearance in 1899. She is 705 feet in length, 32,500 tons maximum displacement, and she has made the transatlantic voyage at a speed of 20.7 knots. The "Oceanic" was the first of a number of great vessels built by the White Star Line with the idea of sacrificing speed for stability and carrying capacity. The first ship to take the record away from the "Kaiser Wilhelm der Grosse" was the "Deutschland" of the Hamburg-American Line, which came out in the year 1900. She was remarkable for the great power of her engines, which, in the second year after her appearance, when indicating an average of 37,500 horsepower, earned for this ship the distinction of being the first to cross the Atlantic at an average speed of 23.5 knots.

During these years, transatlantic passengers began to show in a very emphatic manner their partiality for a new type of ship of moderate speed and of large cargo and passenger carrying capacity. The result was the building, on the part of the White Star Line, of the "Celtic" and her sister ships. These vessels were brought out in 1901 and maintained a speed of but 16 knots, their displacement, however, being 37,700 tons. In 1903 the North German Lloyd put in service a magnificent ship, the "Kaiser Wilhelm II," 706 feet in length, 72 feet beam, which in the early years of her service

crossed the Atlantic at a speed of 23½ knots. During the period in which the twin-screw reciprocating engine was giving such fine service in the transatlantic flyers, the Hon. Charles Parsons in England had been steadily developing a new type of marine boat in the form of the steam turbine. As compared with the reciprocating engine, it had shown marked superiority, except in the matter of coal consumption at low speeds. It was lighter, more economical in coal consumption and required less engineering staff, while its advantages were especially manifest when the ship was driven at the highest sustained sea speed.

Consequently when the Cunard Line determined to build two transatlantic ships of a size and speed far surpassing anything afloat, they decided to install the turbine engine and drive the vessels through the water at 24½ sustained sea speed, with 68,000 horsepower, developed on four shafts. The outcome of this was the appearance of the "Lusitania" and the "Mauretania" in 1907. These vessels are 785 and 790 feet long, 88 feet beam, and at a maximum draft displace 45,000 tons. Both ships have made passages at an average speed of over 25 knots, and at the present time the record is held by the "Mauretania," which has crossed to the westward in four days, fourteen hours and thirty-eight minutes. The best record of the "Lusitania" at the present time is her eastward record—New York to Queenstown—a distance she has covered in four days and fifteen hours.

When the great Cunard boats, nearly 800 feet in length, made their appearance it was predicted that the limit in size had been reached. It was said by learned experts that these vessels would never be surpassed in either size or speed. But hardly had this prophecy been sounded before the White Star Line shattered it into fragments by announcement of plans for two new ships, once again to bear the title of "the largest in the world." These vessels will be known as the "Olympic" and "Titanic" and are already being rushed toward completion at the famous plant of Harland & Wolff in Belfast.

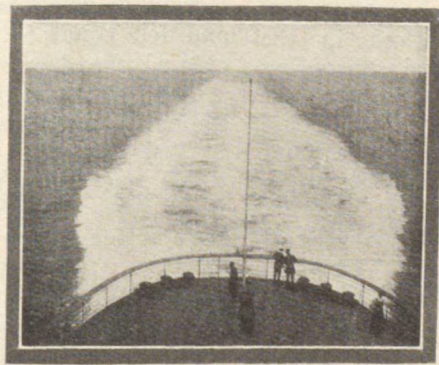
A whole story could be written around these ships alone, so great in all senses

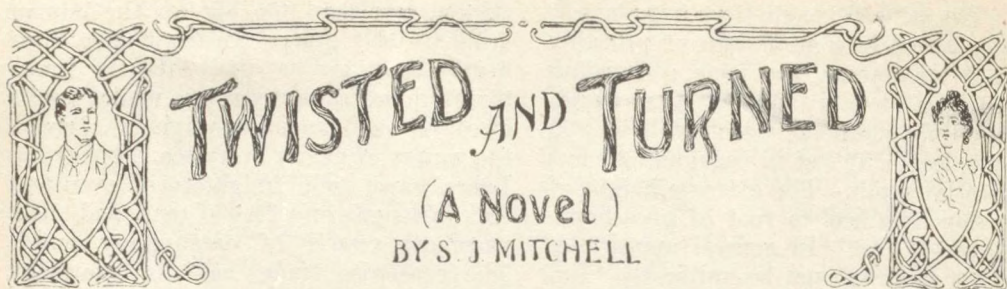
will they be. Although these vessels will not be placed in commission for probably two or three years, the facts concerning them have already startled the world. These truly enormous vessels will be 890 feet in length, 92 feet in beam and 64 feet in molded depth. The extreme height of the ship from keel to roof of pilot-house will be 105 feet. In general appearance the new ships will not be unlike the "Lusitania." They will have four elliptical funnels, each 28 feet in diameter. Their freeboard will be somewhat greater, being about 52 feet at the bow, 45 feet to the level of the main deck, 62 feet to the boat deck amidships and 42 feet at the stern. A striking novelty will be the provision of a single pole mast forward of the bridge. At 35 feet draft the roof of the pilot-house will be 70 feet above the water. No attempt will be made to surpass the Cunarders in speed, 21 knots being the requirement in the contract. To secure this the new ships will be combined with reciprocating and turbine engines driving the wing propellers, which will exhaust into a low-pressure turbine driving the center propeller. In point of displacement the new White Star ships will greatly exceed the "Mauretania" class, the maximum being 60,000 tons, as against 45,000 tons on the same draught for the "Mauretania."

It is hard in a treatise on the steamship to pass by without enlarging upon the wonderful growth of the vessels of various kinds and of different purposes. But the very fact that it must be done goes far toward proving that the story of the steamship and the commerce it has

created is almost too big for the human mind to fully grasp. In the Pacific ships nearly as large as the Atlantic liners maintain a regular service, while vessels of equally as luxurious equipment traverse the waters of nearly every sea. The Great Lakes have their freighters of over 600 feet in length and 10,000 tons, and their passenger vessels of ocean-going build. The coastwise trade has its enormous ships, built for the express purpose, while the navigation of the world's rivers has been in no wise neglected. But the subject is too big, too wonderful, to bear of justice being bestowed upon it.

Just what part the steamship has played in the building and populating of the nations can best be dealt with by the imagination alone, the figures being quite too staggering to bear of closer analysis. Nor has progress in the science of shipbuilding yet come to an end. We have passed the stage where we dare to prophesy the ultimate result. The "Great Eastern" was thought to be the eighth wonder of the world. With the "Oceanic" the world felt sure the limit had been reached. When the "Lusitania" had been launched there was no longer any question about it, for engineers told us no larger craft could be built. But, before we had fairly agreed upon this point, the keel plates of a greater ship, a vessel 100 feet longer were laid. The world is still staggering under this last blow, and somehow the prophets have ceased to predict; inventors have ceased to foretell the end. And probably it is best this way, for who, in the face of all these facts, has the courage to say that "here at last is the end?"





TWISTED AND TURNED

(A NOVEL)

BY S. J. MITCHELL

SYNOPSIS OF PRECEDING CHAPTERS.—Melville Reardon, a young man with extraordinary ambitions, yet a complete failure, wonders why he cannot realize those ambitions. He feels that that mysterious something that has given him such an intense desire for greater things should also give him the power to gain those things. He begins to search for the cause of his failure, and finally resolves never to give up until he has found someone who can solve the mystery. Through his employer, Richard Spaulding, Reardon meets Alexander Whiting. Whiting is a prosperous business man, who has won success through persistent desire. He calls to see Mr. Spaulding on a business matter and happens to mention the cause of his success in the presence of Mr. Reardon. This arouses Reardon's curiosity and it is then arranged that he is to call that evening at the home of Mr. and Mrs. Whiting, where he is to meet Cyril Janos, who is said to possess the information Mr. Reardon wishes to secure. This arouses Mr. Spaulding's curiosity and he makes Reardon promise to tell him all about it the following morning. When Mr. Spaulding comes home that evening his daughter, Adeline, thinks she sees a change in her father, and she is right. He is beginning to change, and for the first time begins to appreciate that strange something about his daughter which has made her one of the most lovable women in the world. Mr. Reardon finds Mr. and Mrs. Whiting to be friends after his own heart and finds the wisdom of Cyril Janos to be the solution of his problem. Before he leaves, Mrs. Whiting invites him to call the following Wednesday evening to meet two of her special friends and partake in a timely discussion. On the street car, on his way home, Mr. Reardon meets Mrs. Arnold, who invites him to call the following Friday evening to meet a young woman whom she has selected to be his wife. He accepts the invitation against his will, and wonders, as he reaches his own home, why he wants to meet this young woman, as he strangely feels that he should have refused the invitation. He resolves to keep his appointment, however, and retires, his heart full of joy because he has now found the way to realize his ambitions. The following morning Mr. Spaulding questions Reardon closely about Mr. Whiting. Mr. Reardon, through an exceptional experience on the way to his work an hour before, is enabled to give the very information that is wanted. Later in the day Mr. Whiting is requested to come to Spaulding's office and explain his rise from an insignificant position to his present important position. Mr. Whiting complies, and at the close of the interview Mr. Spaulding offers him a position with a salary nearly four times as large as his present one. Mr. Whiting accepts, and Mr. Reardon, noting closely what was said during the interview, is convinced that he has found the real secret of success. At the Wednesday evening gathering a number of important problems are discussed from the standpoint of one who has conquered. Mr. Warren, a young, pessimistic philosopher, and a complete failure, is compelled, by the soundness of Mrs. Whiting's ideas, to completely renounce his own. And as the new light comes into his mind he discovers how he can promote human welfare on a very large scale. Miss Kirkwood, a young woman who deserves the best in life, but who somehow secures practically nothing, is told the reason why; she is also told how she may win the best man in the world. She resolves to try and promises to give the secret to every girl in the world. On the following Friday evening Mr. Reardon meets Miss Cameron, and under the peculiar influences of Mrs. Arnold, the two young people fall in love. On his return home that evening he strangely meets Lillian Strong, a young woman worth two millions, and deeply interested in young men with extraordinary ambitions. She invites Mr. Reardon to her palatial home on the coming Sunday. The following morning it is discovered that Richard Spaulding has failed completely in business, and, heart-broken, he goes home to tell his daughter.

X

IT was nearly eleven o'clock in the morning when Richard Spaulding came home to tell his daughter what had happened. On his way to the house he had worked up his will to a point where he thought he could tell her everything and yet be calm. He had also framed in his mind a few statements of hope and consolation with which he meant to make it as easy for Adeline as possible, and assure her that he could find a way to shield her from personal suffering through the loss. He clung tena-

ciously to what he had resolved to say, and felt equal to the occasion until he entered the door.

But when he saw his daughter, so radiantly happy and so sweetly contented in their luxurious and delightful home, which was theirs no more, his strength failed him. There was no real strength back of his determination and trumped-up resolve; it was only superficial will-power, stimulated temporarily with animal force, and it did not stand the test.

As he entered, and beheld at a glance the riches and glory that were passing,

and thought of the misery and want that seemed to follow at his very heels, his mind became dazed and bewildered. He could scarcely frame an intelligent thought, and his heart sank to the very lowest depths of darkness and despair. Without speaking a single word, he literally fell into a chair and began to sob aloud. And so deep was his grief that it was some time before he became conscious of the gentle presence of his Adeline, as she was patiently waiting to learn the trouble, so she might offer peace and rest with her soothing balm. Finally he was able to tell her, in broken sentences, that he had lost everything; but he was struck absolutely speechless for several minutes when this mysterious daughter calmly replied, "No, it is not the truth."

Presently, he declared, almost at the top of his voice, "But it is the truth, and I have suffered an age of torment coming here trying to tell you."

"I know how you feel," she replied sweetly, as she seated herself on the arm of his chair, and began to soothe his aching head with hands that could almost speak every word in the language of love; "but I wish to say," she added, with a tone that seemed to ring with authority, "your loss is insignificant and does not disturb me in the least."

"Why, what do you mean?" he demanded, his soul on fire with something he could not positively understand.

"Simply this, that I am living in a world that neither poverty nor misfortune can ever touch."

He looked at her in a sad, bewildered manner that was pathetic in the extreme. Had she already lost her mind? Yes, he had feared this from the very moment his misfortune was discovered. What could he say now? He must say something, and he began to try to think. But his efforts were momentarily suspended, for she again began to speak.

"You say you have lost everything. I say you have not. You still have yourself and all that that term may imply. You still have the power that produced what you once possessed. That power can still continue to produce; and if henceforth employed in legitimate channels only, it can produce far more than

you ever seemed to possess before. However strong a power may be when used in the wrong, it becomes infinitely stronger when used in the right."

She paused for a moment to note the effect of her remarks, but as he was not ready to reply, she calmly continued.

"When there is a break in the reservoir at the foot of the mountain, the rushing stream may seem to indicate that all supply is being lost. But when we turn our eyes away from the passing calamity and look further toward the source of supply, we change our minds. Beyond lie the mountain peaks of perpetual snow, forever environed in the warmth of the sun. Simply repair the break, and make the entire wall stronger than before. It will soon be refilled, even to overflowing."

"Adeline, I do not understand you in the least; explain yourself. I am almost frightened at your conduct. I expected you to break down completely, but instead you act as if nothing had happened. Such conduct is not normal for a woman under the circumstances. There must be something wrong."

"Calm your fear, father," she said, and she said it in a way that made her countenance literally radiate with loving kindness and good sense. And for a moment he seemed to try to do what she said. Seeing this, she gently resumed.

"There is nothing wrong with me whatever. It is natural for the weak to fall down when threatened with adversity. It is natural for the strong to remain untouched and undisturbed in the midst of every adversity."

To this he could not reply, and she presently continued, giving marked emphasis to every word.

"I am stronger than anything that can ever come into my life. And why should I not be? I am not a thing; nor am I a group of things; I am a human being, a living soul."

"Adeline," he implored, tearfully, "how can you be so unconcerned when you know we are penniless?"

"I am not unconcerned," she said; and as he looked into the fathomless depths of her beautiful eyes, he saw she spoke the truth. "I am as tender as you are," she continued, "and feel far more deeply;

but in my world there is always peace, regardless of the storms that may rage about me."

"That does not alter the fact that we are penniless," he replied, in a tone that was almost sarcastic.

But she paid no attention to the tone of his voice. She simply rose to her feet and, giving full expression to all that was tender and beautiful and strong in her nature, her personality assumed an attitude that could have inspired any mind to leave the depths of despair forever. To look at her, and then think of weakness or failure, was to forget that weakness or failure could ever be. And the father did look at this wonderful daughter with an interest that he had never known before. For a moment there was light in his countenance. Noting this, she gently, but firmly resumed.

"He who can be calm, serene and undisturbed when everything has been taken away, has the power to regain everything that has been lost."

As these words were spoken the secret of her strength and faith began to dawn upon his bewildered mind. No, she had not lost her mind. Instead, she had found the full measure of her mind. So much was clear. But what could this fact do for him? Nothing, it seemed, for when he thought of himself, his future became as dark as the blackest night. At last, he ventured to ask, "What can I do, Adeline? I came home to give you strength and consolation, but the tables have turned. I am the helpless child. You are the reigning queen of this godless country into which we have suddenly entered."

"Now you can begin again and begin right. You can rebuild upon a firm foundation, and you shall regain everything."

These last words seemed to ring with a power that was more than human, and somehow he could feel these words becoming a part of himself. *You shall regain everything*, he found himself repeating again and again in his own soul, until the conviction became so deep that nothing seemed more certain in his life. But his senses were not convinced, and turning to Adeline, who had taken a chair

near the other end of the room, he anxiously asked, "How do you know that everything will be regained?"

"Because it is in you. Now you will have the opportunity to prove what the real Richard Spaulding can do. What has just happened is the best that could have happened. The sooner the wrong is swept away the better. Now you are free to make the best of yourself. Now you can go and utilize all the riches that your nature may contain. And these riches still remain. Therefore, I say, rejoice. So long as you still have the source of supply, it matters not if you lose some of it to-day; you can go back for more to-morrow."

"Your views are undoubtedly correct, Adeline, and your words, your attitude, your countenance—everything about you seems to give me peace and courage; but what are we going to do? We have nothing, absolutely nothing, and we have to leave this beautiful home at once."

The thought of being compelled to take his daughter away from all comforts and luxuries into—he knew not what, brought back the darkness and distress again to his mind; and he found it impossible to suppress his tears. But Adeline, without showing the slightest trace of regret, replied in her usual firm and gentle manner.

"This home is beautiful. That is true. But I am living in a mansion that is ten thousand times more beautiful. It is a home wherein there is always peace and joy; and I want you, father, to come to that home with me now."

"Oh, yes; I will try to go anywhere with you in your imagination; but please be sensible when you deal with sensible facts. We are face to face with a practical problem. I tell you we have to leave this house."

"When we do we will go to one that is better."

"Adeline, you are certainly beyond my comprehension. I am at a loss to know whether to be provoked or inspired by what you say. You may expect to go to a better place than this, but how are you going to do it? Neither of us has a penny."

"When the mind falls down, everything falls down. When the mind goes wrong, everything goes wrong. But when the mind goes right, and continues to move forward, toward the better, everything will come right, and that which is better will surely be realized."

"Adeline, you are simply philosophizing; and I don't blame you for catching at every straw that may be near; but, after all, your philosophy, when face to face with grim facts, will prove to be nothing more but a pretty piece of fancy."

"You may call it so, but it gives me serenity and happiness; that is more than you have secured from your very substantial facts."

"It is the bitter truth, Adeline; nevertheless, pretty dreams do not build mansions; nor do they provide food and attire."

"On the contrary, everything that is worth while in this world is linked to a dream. No man ever accomplished anything without having the product of a dream with which to work."

"True enough, I admit. But what comfort can such thought give to a man when he has lost his money, lost his friends, lost everything, and been humbled to the very lowest place in life?"

"You have not been humbled, father; you are not stepping down; you have simply been given a real opportunity to step higher up. You know when there is something in a man, failure will invariably make him great. And there is something in you. Before you were held up by the mere show and glamour of things; now you will be held up by the power of your own manhood, the supremacy of your own unconquered soul. And as for friends, please remember that when the lesser departs, the greater comes in. Now we shall have real friends—friends that love us for what we are, instead of pretended friends, that love us for what we possess. And what a difference it will be. Oh, how I rejoice at the thought of that difference."

For a few moments Mr. Spaulding was silent. He realized that his daughter was too strong to be moved by what had happened, and he was beginning to understand what such strength would mean to

him during the dark days that were at hand. There was a silver lining to the cloud, but the cloud was there. Would her strength help him to remove the cloud, or would her attitude and soothing presence only make poverty a little easier to bear? Hoping she might give him more light on this subject he again began to speak.

"My own Adeline, you are a marvel; nothing less. Tell me, where did you get your wisdom, your unbounded spiritual strength? You speak as if some supreme power had taken possession of your soul. But will your strength hold out to the end?"

"It cannot possibly fail," she replied, her voice again ringing with authority. And as she rose to her feet and walked to another part of the room, every movement of her body seemed to be alive with that same unfailing power. "The strength that is within me," she continued, "is greater than any misfortune, greater than any calamity that can ever befall me. And through that strength I shall bear everything without a murmur; through that strength I shall conquer everything and gain everything that the fullness of my life may require."

"You undoubtedly will, Adeline. You are not a weak woman. You are the most tender, the most beautiful and the most loving woman that ever lived; that I always knew; and to-day I have discovered that you are also a spiritual giant. Such a woman will surely fare well; to such a woman the world will surely be kind. But how different it will be with me. There are no opportunities for me any more, and my best days are gone."

"On the contrary, your best days are yet to come."

"Absurd, child! Absurd! I am past fifty; my youth is gone and my vigor is waning. What do you mean by such statements? Be sensible, please, be sensible."

"That is precisely what I am trying to be. By being sensible I am calm and composed at this moment instead of hysterical. And in that respect I shall continue as I have begun; I shall not become a burden to you, but rather a help and even an inspiration, if you so desire."

However, permit me to repeat, that your best days are in the future. Nature will give you more vigor and virility during the next fifty years than you ever had during the past fifty, if you wish her to do so. And the world is ever in search of the great and the useful. You can be both if you will."

"I fail to understand you, Adeline; though I wish I could believe as you do; somehow I think I can see reality back of your dreams and your fancy; there seems to be something there that is tangible."

"Those things in life that seem to be the most unreal are after all the only things that are secure when the so-called real things are taken away."

"True again. I admit it. Your philosophy is sound, Adeline. I believe what you say. I am beginning to understand. Better days will come. But in the meantime how are we to be provided for? I see no way. No one will trust me now. No one will care to have anything to do with me. I have not played fair with the world. I can repent and mend my ways, but time will be needed to prove that I have actually changed. And during that time I see nothing but darkness in my path."

"We shall be provided for," she declared, in a tone that would have inspired conviction anywhere in the world. "Something *will* happen," she continued. "When the wrongs of a man's life come back to him, the good that he has done will come also. All is not darkness and distress before us. We shall have all that we need. That is *my* faith. Upon that rock I stand, and I refuse to move a thousandth part of an inch, come whatever may."

With these last words all the black clouds in her father's mind were dispersed completely. "Wonderful Adeline," he thought to himself, too deeply moved to speak. What an inspiration she was as she stood before him, her personality seemingly charged with unconquerable power, her face radiant with a strength that was kindness, tenderness, love and faith, all most beautifully blended into one. She seemed to feel the pain of everything that had occurred, and yet she was far stronger than what she felt. She

was in the midst of storms, distress and blackness, but not an atom in her being was disturbed in the least. And gradually the tender presence of her marvelous strength was healing her father's heart, while the sublime serenity of her words and actions was giving peace to his troubled mind.

To her father's awakened soul she was now nothing less than a reigning goddess, holding in her right hand the elements of power and in her left the elements of love, while the glory of her wisdom beamed through her countenance as the radiant light of the sun. Slowly he recognized the lofty position she had taken in this unfortunate event. He had been crushed with the crash of things; she had become stronger in the midst of it all and was towering above the confusion of it all, seemingly ready at any time to command every circumstance to fall at her feet and obey.

"Adeline," he said, with a voice that was calm and a tone that had the ring of strength reborn, "I will do as you say."

She had conquered. Her heart was full, and he thought he noticed her eyes becoming moist. But that was pleasing rather than otherwise, for though she was a spiritual giant, it was comforting to know that she was also a sweet and tender woman. What if he had lost everything? He still had Adeline. Could anything in the world give greater joy? And then she had invited him to come and live in her world—a world wherein there was always peace and joy. Yes, he would go—go at once, for now he knew what that was, and he was beginning to see that to live in such a place was worth infinitely more than all the wealth in the world. But Adeline had declared that he would regain everything, and he believed she knew whereof she spoke. At any rate he would call upon nature to give him back his virility, his ambition and his youth, and begin again. He would build anew, and as he thought of the possibilities that such a course might present, he began to feel an inner joy that he had never known before. He imagined it was the joy of the conqueror, the feeling that comes to him who wins because he deserves to win. Yes, such was the future

that he could now discern before him. It was a future in which the real Richard Spaulding would be all that there possibly was in him to be. And how interesting it would be to live to see the development of such a future.

Suddenly he rose to his feet a new man. His face was beaming with light and joy and his entire personality was erect with a power that knows no kinship with fail. Giving Adeline the most affectionate good-by he had ever given her in his life, he left the house to begin at once the building of this new and brilliant future.

XI

When Richard Spaulding returned to his office he found Mr. Whiting there waiting.

"I came to congratulate you," Mr. Whiting began; "you are now free from a burden that no man, to be true to himself, can afford to bear; and you are face to face with the greatest opportunity of your life. I consider this the most successful failure I ever knew. I have special reasons for thinking so, and ere many weeks you will fully concur with my conclusions."

"I know it," Mr. Spaulding replied, with enthusiasm. "I feel like shouting for joy. I have lost everything, but I have found myself. Mr. Whiting, if you knew what happened at my home this morning you would cry for joy. But we shall not speak of it now. You wish to see me on some personal matter, I judge, so please come in."

The two men entered the private office, where they remained for about thirty minutes. When they returned, Melville Reardon thought they looked even happier than before, and he was becoming anxious to know what so much satisfaction and joy might mean in the face of such a serious disaster. But his anxiety was only partly satisfied, as Mr. Spaulding seemed too busy to talk during the rest of the afternoon, and was therefore very brief in his orders and explanations. When they were getting ready to leave, however, Mr. Reardon was told to come back for another week to help close up

the business, and he was also promised some interesting information before their last week together was at an end.

Returning to his own simple abode, Mr. Reardon did not know exactly how to feel. He was in the midst of one of those moments when it hardly seems right to be happy, yet wholly wrong to be sad. He had much to think about, and the most important, for the time being, was the fact that within twenty-four hours he would be a most welcome guest at the luxurious home of Lillian Strong.

Sunday morning arrived at last, and finally Sunday night. It was an evening that Miss Strong had been looking forward to with the keenest delight, and when Melville Reardon also arrived she was happy indeed.

"Did you go to church to-day?" she asked, as the two were seated on the lawn, surrounded with flowers and trees and a most delightfully fragrant atmosphere.

"No, I did not," he replied, quietly, wondering why she should open the conversation with such a question.

"Neither did I," she said, with a tone of satisfaction, evidently pleased to learn that there would be no religious differences between them. "In fact, I seldom go," she continued, "especially in mid-summer."

"That is not the reason why I was not in church to-day."

"No? You have other reasons. Possibly you are not religious. Though we shall not be any the less friendly on that account, as some of the truest and best people I know care nothing about religion whatever."

"I beg to differ with you there, Miss Strong. We are all religious, at least to some degree. And the better and truer we become, the more religious we become."

"I hardly understand you, Mr. Reardon. Will you tell me what you mean by being religious?"

"My religion is to do the best I know in this world to-day. But to do my best I must make the best use of everything that is within me. And the term 'everything' covers not only the powers of personality, but also the finer elements of mind and soul."

"Then with you religion is not a matter of creed or doctrine."

"Not in the least. Religion is not to believe what theologians think about God, but to always do the will of God."

"I like that. But will you tell me what you mean by the will of God?"

"My simplest definition is this: To do my best under every circumstance, and to add perpetually to the welfare and happiness of all, including myself. That, according to my mind, is what God wants us to do."

"Beautiful! Beautiful, indeed! And I can readily understand that from your point of view we could not be human unless we were religious."

"That is certainly true. But it is also true that we become more beautifully human as the finer elements of mind and soul become more active. We also become correspondingly more worthy, more useful and more happy."

"I believe that, Mr. Reardon. It is these finer elements that you speak of that make life worth while. And I think I can see how life could be made gorgeously beautiful and supremely happy if we knew more about these richer kingdoms of mind and soul."

"We are in perfect harmony on that great subject, Miss Strong. And to know that we are makes me happy, indeed."

"Thank you, Mr. Reardon. I appreciate these last words more than I can say. But you did not tell me why you were not in church to-day."

"When I go to church I do not wish to be told that I am sinful and weak. I know that before. I do not wish to be told what to believe. The beliefs of one age are the heresies of the next, and *vice versa*. I wish to be told what I am, not in my weakness, but in my strength. I wish to be told, not what I have failed to do, but what is in me to do. I want to listen to something that can touch the soul, something that can carry my spirit to empyrean heights and reveal to my vision the beauty and splendor of existence sublime."

Lillian was silent, evidently touched by the beauty and eloquence of his sentiments, and realizing that she was in the presence, not of a mere man, but of a man

who had visions—a man who had felt the power of that something that makes humanity great—a man within whose restless soul the elements of nature were mysteriously at work preparing for some rare and wonderful career.

Noting her silence and the marked attention of her attitude, he continued to give the reason she had asked for.

"If I am to be true to myself, I must live, not simply in my body and in parts of my mind; I must live in all the kingdoms of my mind and in all the kingdoms of my soul as well. But to train myself to live truly in those other kingdoms, or what we may term the upper story of this building we call man, I must go there frequently. I must needs be lifted up, so to speak, and Sunday morning is the time most suited for that sublime experience. How I wish that some real prophet would arise in the world—someone who could tell us the truth about these things—someone who could lead us out of the Babel of mere words and the warfare of useless doctrines into that lofty realm of peace and joy where we all shall find life—into that secret place in the soul from whence comes everything that is worthy and noble in man."

"Your sentiments are most beautiful," declared Lillian, as she looked up at him in a manner that was closely akin to worship. "And as for the prophet you speak of," she continued, her face lit up with the glory of those transcendent thoughts his words had engendered in her mind, "I am absolutely certain I am in his presence now."

"No," he replied, half sadly, "that is not my work. I am made for something else and I have other ambitions."

"Yes," she exclaimed, with eagerness. "And you were to tell me to-night about those ambitions."

"That is true. But there are certain reasons why I could not tell you all to-night. Though I shall tell you everything except the real nature of the ambition itself. I may tell you that later; that is, if you decide that you wish me to do so."

"Go on, Mr. Reardon, please go on. Tell me all you can. I shall be profoundly interested, I know."

Her wish was granted. He told her everything that he had passed through in connection with his two leading ambitions, just as he told Cyril Janos at his first meeting with that remarkable man. Then he told her what that masterful scientist had advised him to do; and, lastly, he explained to her his present position. In another week he would be without work, and the problem was what to do. Should he seek another position, or should he try once more to carry out his lifelong dream? He almost felt as if he could wait no longer. Everything within him was urging him with more and more persistence to make a bold dash at once for the goal he had in view, but as yet the way was anything but clear.

"There is a way," she whispered softly, as she looked into his eyes with appealing tenderness. "Your ambitions can be realized, Mr. Reardon. It is perfectly clear to me how it can be done, and you can begin at once to work out your great career."

"You are very kind, Miss Strong, for taking such an interest in my life and my future, and some day I hope you will tell me what that way might be."

"Yes, I will tell you whenever you wish," she replied, in a low tone, her voice trembling a trifle. "And I shall appreciate the privilege most highly," she added, with emphasis. "Though you will promise me, will you not, to make no final plans until you have considered my way?"

"I promise," he said, as he rose to take his departure. And after a few moments of most friendly leave-taking, he left the luxury and delight of this most beautiful home to again re-enter his own uninviting abode. He always found it difficult to keep up his spirits when he compared his own place of shelter, for that was all it was, with the luxury that others with less ability enjoyed. But on this particular night he felt that he had not the right to even express the slightest dissatisfaction with his accommodations, for he knew there was a palace waiting to receive him, if he would only utter a certain word at a certain time.

When Monday morning came, and he realized that it was to be his last week

with Mr. Spaulding, he found it necessary to use all the power of will in his possession to maintain a cheerful attitude. But as the day wore on he was aided greatly in these efforts by the way Mr. Spaulding faced the situation. That man went about the closing up of his ill-fated business with never an expression of regret, neither in speech nor in outward demeanor. He acted as if he were simply getting rid of mere trash, and seemed supremely happy over the prospects of beginning at the bottom once more.

To Mr. Reardon the week passed somewhat slowly, and he was glad beyond words when Saturday finally arrived. What to do next, however, was the problem, and the more he thought of it the more confused he seemed to become.

To find moments of relief from his mental distress he called frequently on Miss Cameron during the four weeks that followed. And the relief he sought was always forthcoming in her presence. She was invariably bright and happy, and he forgot the more serious things of life in her light-hearted conversation. Gradually he came to think more and more that this girl could make him happy, and he gave her to understand in various ways that his visits were more than friendly calls.

He received several invitations to the home of Mrs. Arnold during the same period, which he accepted gladly. It was Mrs. Arnold's purpose, in extending these invitations, to impress upon his mind that Miss Cameron was the girl he needed. Though he did not discover this purpose until later. But she partly succeeded, and he soon made up his mind to declare his love for the girl with the golden hair.

The following Sunday he decided to carry out these intentions, but on his way to the home of his chosen love he met Miss Strong. This made him hesitate. During the evening, however, he made several attempts to tell Miss Cameron that he loved her, for she certainly seemed sweeter than ever. But whenever he tried to tell her the picture of Miss Strong came up in his mind. What could that mean? he wondered. Then he re-

membered that he had to run for the car that he took in coming that evening, an act that he had never committed on Sunday before. But somehow he "wanted" that particular car, though he saw another coming less than a block away.

He went home without saying anything about love. A few days later he went to see Miss Cameron again, and he was determined to declare his love, but as he alighted from the car Miss Strong passed in her carriage. The same incident, under slightly modified circumstances, occurred again near the close of the week, and Mr. Reardon concluded that something was wrong. Why did something mysterious always come in his way whenever he undertook to secure a wife? Was this another instance where his subconscious mind was "interfering" so as to prevent an action that did not correspond with his two leading ambitions? This thought brought him to his senses, and he could see very clearly once more that Miss Cameron did not resemble the "one woman of his dreams" in a single respect.

In the meantime he was in constant search of a position, but could find nothing that was satisfactory. At times he was almost discouraged, and frequently resolved to go and see Cyril Janos, a privilege he had not taken advantage of recently. And the reason was he felt he had not made the proper use of the information already received. He still permitted himself to be drawn in every direction, and the mental part of himself still seemed to be twisted entirely out of normal shape. If he could only turn all the powers of his being upon the goal he desired to reach, a change for the better

might come speedily, but this was something he had not accomplished as yet. There was no reason, however, why this might not be accomplished at once. He knew how, and had both the force of character and the will. Then he would surely find a way to begin the real work of his life.

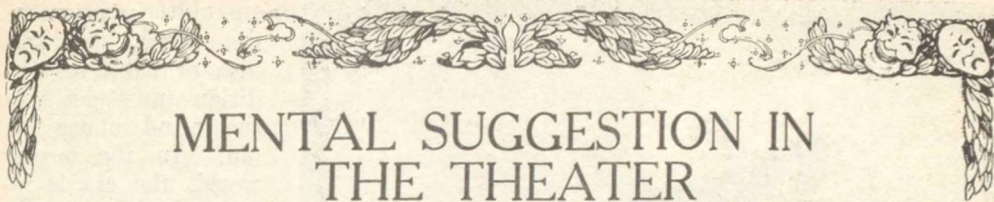
But there already was a way. He could marry Miss Strong. He knew that was the "way" she had reference to, and it certainly would solve his problems. While he was working out the plans of his great ambition he would not have to earn a living if he had Lillian for a wife. Possibly that was the answer to his prayers. No, hardly; for she did not resemble "the woman." True, he was very much attracted to Lillian mentally, but he was not attracted to her personality; and for some reason, personal attraction seemed the most desirable.

These were his thoughts, and the more he entertained these thoughts the darker his mind became. Finally, after four weeks of separation from his real friends, another ray of light came into his life, and a bright, strong ray it proved to be. He received a letter from Mrs. Whiting, and an invitation to come to a special gathering at her home the Thursday night following. "All the select souls will be there," the letter went on to say. "Each one present will be expected to ask some momentous question, and Cyril Janos will reply."

Now there was something to look forward to, and his heart danced with joy. Noting the address, he observed that it was the house formerly occupied by Mr. Spaulding and the fairest of daughters, Adeline.

(To be continued in the November issue)





MENTAL SUGGESTION IN THE THEATER

By J. ALEXANDER FISK

THERE is a belief, current among many, that the modern theater exercises practically no influence, either for good or evil, upon the public mind; that its only function is to amuse, and that the average theater-goer receives no lasting impression of vital significance from what he has seen or heard at the play. This belief, however, is wholly erroneous as the following pages will clearly show, especially to those whose understanding can go beneath the surface of human thought and action.

The theater is a most powerful factor in molding the life of those who attend. And the reason why is made evident by the three following principles: First, the force of suggestion is one

of the most potent forces in the shaping of thought, character and conduct; second, practically every word and movement on the stage is a suggestion; and third, the human mind is more susceptible to suggestion in a theater than in any other place.

The performance behind the footlights appeals directly to the feelings and the emotions of the audience; and it is when

man's emotional nature is aroused that he becomes the most susceptible to suggestions. Every play gives out impressions and suggestions by the hundreds at every performance; and as all those impressions

correspond with the nature of the play itself, it is easy to understand what the effect of each particular part of a play will be.



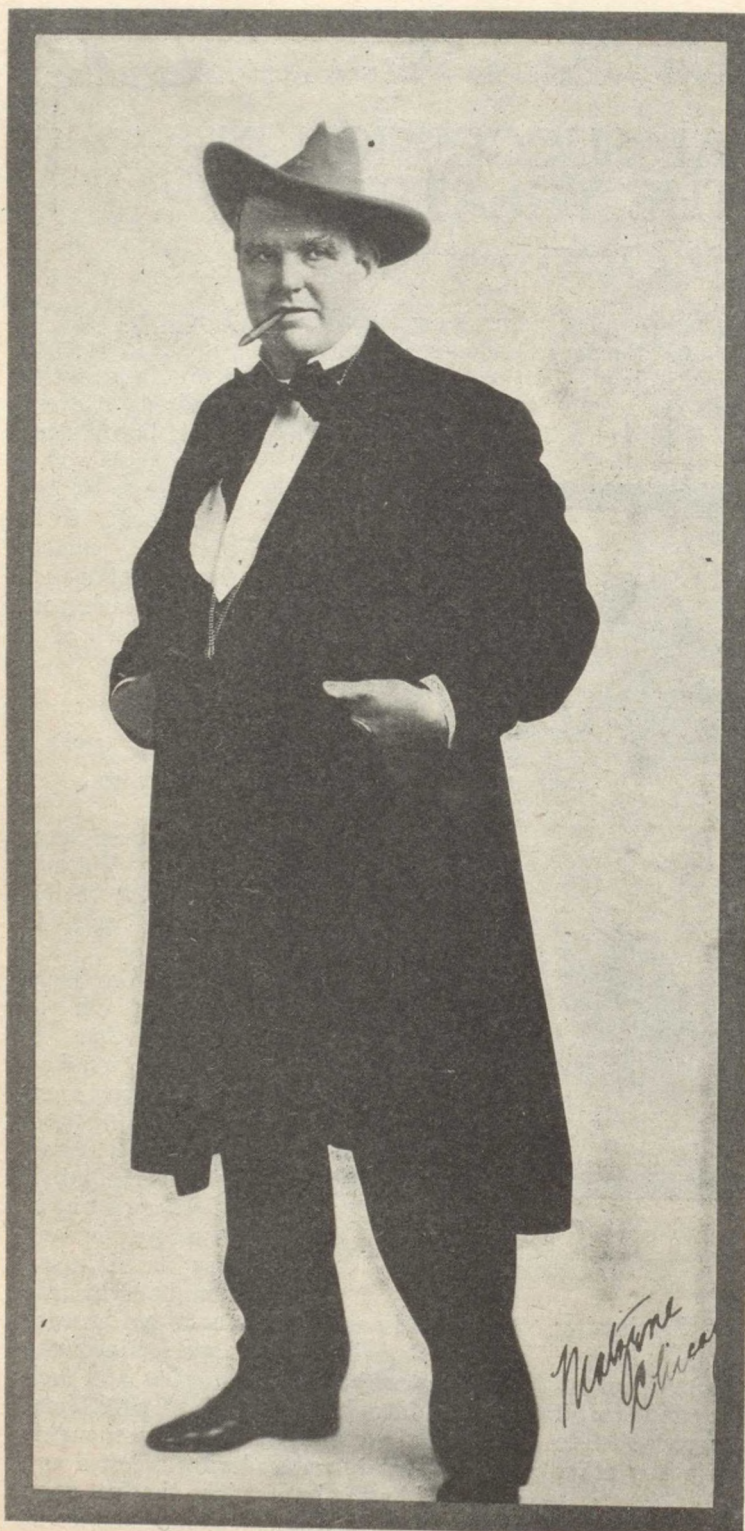
Miss Ruth Shepley,
Who plays Caroline Langdon in "The Gentleman from Mississippi"

Meaning of Suggestion

The term suggestion literally means to "bring under;" and is specifically applied to any mental action or process that is brought under some other mental action or process already existing in the mind. A suggestion, therefore, is any idea or impression brought into

the mind in such a way as to get beneath present thoughts, desires and feelings, and thus undermine those thoughts and feelings by introducing others of a different nature. In each case the new thoughts and feelings introduced are suggested and produced by the impressions that act upon the mind in this undermining manner at the time.

To remove an old idea, an old habit or



Mr. Burr McIntosh
As Senator Langdon in "The Gentleman from Mississippi"

an old condition in the mind, the new idea or habit or condition must get into the mind under the old. In the mental world, the old is removed only when the new undermines the old; and as the force of suggestion invariably tends to undermine—to get beneath—that which already exists in the mind, it is evident that any present state or condition in the mind can be removed by suggestion, and replaced by something different. That which is removed, however, may be good or otherwise, depending upon the nature of the suggested idea that has come to take its place. No idea or impression from without is a suggestion unless it gets beneath present ideas or impressions in the mind. A suggestion is a suggestion only when it acts through the undercurrents of the mind. In other words, that which has the power to enter into the mental undercurrents is a suggestion, while that which fails to enter into those currents is not a suggestion.

Why the Play Is Suggestive

The undercurrents of the mind constitute all those mental movements that act

through the deeper feelings and emotions. And as the theater appeals directly to the emotions, nearly every impression conveyed by the play will tend to enter the mental undercurrents in the audience. The door to those undercurrents is thrown wide open, so to speak, in the theater on account of the emotional effect of the play; every impression conveyed is therefore admitted readily, and for the most part unconsciously, and at once begins to undermine.

Where the impressions and suggestions conveyed by the play are very strong and deeply intense, the deeper emotional life of the audience will be literally filled with those impressions; the field of feeling in each individual present will be re-seeded, and a new crop of thought, character and mental life will be forthcoming. Some of those new plants may be undermined and removed before they reach any considerable growth, but many of them will continue to flourish, and will exert their influence upon the life and the conduct, as well as the achievements, of the person's future.

Many leading psychologists define suggestions as that process by which ideas are conveyed to the mind through the senses when the impressions of those ideas are *insinuated* or subtly introduced rather than conveyed by rational argument. In



"The Gentleman from Mississippi"
The Senator tells Carolina she must face her own music

other words, where an idea is conveyed to the mind by suggestion it does not enter through the intellect, but through the feelings. You do not accept a suggested idea because you have reasoned about it. When the mind responds to suggestion it does not reason in the matter; it simply responds because that which presents the suggestion is playing upon the feelings; and when the feelings are highly active, reason is more or less in abeyance, while the mental door to the undercurrents is thrown wide open.

This fact proves in the same way how the theater exercises its suggestive power. In the majority of plays, the feelings are appealed to first; reason comes second, if at all. The theater does not present its case through rational argument; it leaves the intellect alone; it goes direct to the deeper feelings of man's emotional nature; it carries all its ideas and impressions into the undercurrents of his mind, and it does this so effectively that he accepts those impressions by the wholesale without thinking for one instant about what is really taking place within his own mental world.

Most Plays Beneficial

The fact, however, that suggestion tends to undermine and remove different conditions that may exist in the mind, and that nearly every word and movement on the stage is suggestive, does not prove that the play always tends to undermine what is good in human nature. It depends altogether upon the play. Some plays have a strong tendency to undermine everything that is good and wholesome and true in mind and character, and few people can attend them without be-

ing mentally and morally injured to a marked degree. But most plays are decidedly beneficial, at least in some of their parts, while there is many a play that exerts far more power for good at every performance than a thousand sermons.

My own experience in witnessing a good play is shared by many; in fact, I believe, the majority. Whenever I attend a good, strong play, all my best qualities are thoroughly aroused, and I leave the theater with more ambition and deter-

mination than I ever possessed before. My mind has been so deeply impressed by the talent displayed on the stage that my own talents are aroused thereby, and worked up, so to speak, to their highest state of activity. This condition continues to a very marked degree for days after, and sometimes weeks, and that it has a lasting effect of considerable value to me, I know.

For several days after attending a good play, be it musical or dramatic, so it is good and strong, I can do better work. My mind has been refreshed; my mental undercurrents have been stirred to renewed activity; new impressions have come in *beneath* the old, useless



"The Gentleman from Mississippi,"
Act II
Caroline tells her pa her troubles

ones, and my power to produce more ideas and better ideas has been decidedly increased. In fact, renewed and increased activity is noted all through my mental system, and the reason is that my deeper mental life has not only received a wholesome stimulus, but it has also been nourished with a feast of rich thought. If those same thoughts had entered through my intellect alone, their effect would not have been nearly as great, because it is only when thoughts go down into the feelings that they reach the rich subsoil of the mental field. For this reason, a sermon or a lecture is far more effective when it appeals to the heart (the feelings) as well as to

the intellect; and it is those truths that *touch* the soul as well as illumine the intellect that satisfy completely the entire nature of man.

Plays that are classical, or that verge on the classical, appeal both to the intellect and to the emotions; and as everything connected with such plays suggests "quality," the effect is highly beneficial. No person can habitually attend such plays without noting a steady improvement in the quality of his own mind; but as the appreciation of such plays demands a cultivated taste, or a strong desire for superiority in thought and life, the field

of the classical play is limited. The widest influence for good, therefore, must come from those plays that appeal principally to the emotions, and that convey only such impressions as tend to arouse the best that exists in mind and soul.

Criticism That Is Not Criticism

Mental suggestion may be conveyed through all of the senses, but it is conveyed chiefly through sight and hearing; and it is an axiom among psychologists that the effect of a suggestion is doubled if it is received through two senses in-

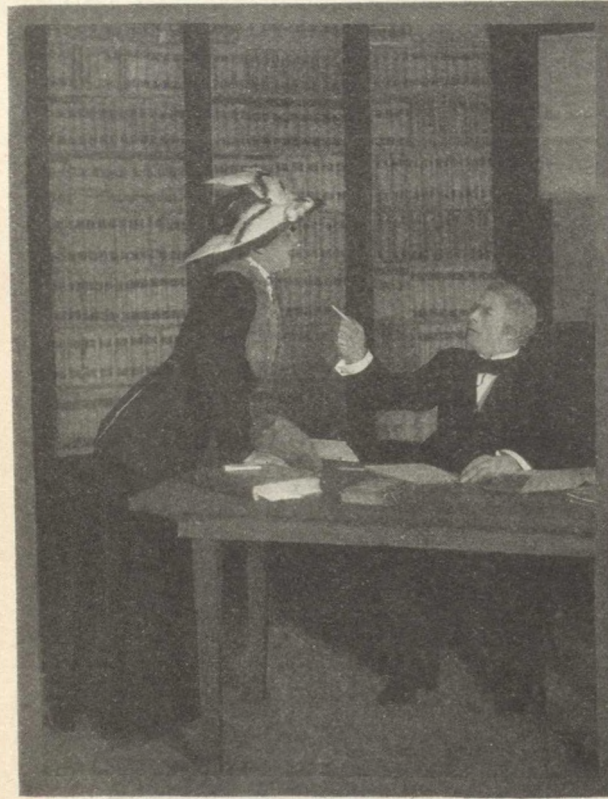


Scene from "The Climax"

When Adelina von Hagen (Leona Watson) is told that she will not be able to sing again. Effenham Pinto as Pietro Golfanti

stead of one. This illustrates again why the suggestive power of the stage is so great, as it conveys most of its impressions through both of these senses simultaneously.

Those who criticize the stage, however, do not, as a rule, consider the suggestive element in all of its phases. They are of the opinion that the stage is harmful, and they denounce accordingly; but they



"The Third Degree," Act II

Mrs. Jeffries (Helen Ware), by subtle suggestions, induces Mr. Brewster (Edmund Breese) to take up her case

do not stop to examine fairly why the stage is harmful; if they did, they would find that the stage possesses far greater power to do good than harm. The stage exerts its influence entirely through the element of suggestion; and as suggestion works both ways, it is folly to try to prevent its influence for good simply because it has sometimes been used in an undesirable manner.

The larger part of the criticism that is directed against the theater as an in-

stitution is not criticism at all; it is simply ignorant denunciation. And though such expressions carry weight for a while, with a certain class of people, it is only for a while. All minds seek, sooner or later, to know the reason why; but the "reason why," with respect to the influence of the theater, is found only in a calm and deliberate study of psychology. When we know why a play exerts a certain amount of influence, we can select those plays only whose influence is desirable; and this we must. The theater has come to stay. It is an institution that will play a most important part in the molding of future civilizations; but how it will play its part will depend greatly upon how clearly we understand and how wisely we apply that element — mental suggestion — through which its influence is exerted.

The Psychological Atmosphere

Everything about the theater tends to produce a certain psychological atmosphere; and this atmosphere causes the mind to become highly susceptible to every idea or impression that may be suggested. Not that the suggestions thus received are expressed in action at once; they do this only at intervals, but they are always lodged deeply in the mind, and will, in most instances, express themselves, in part at least, later on.

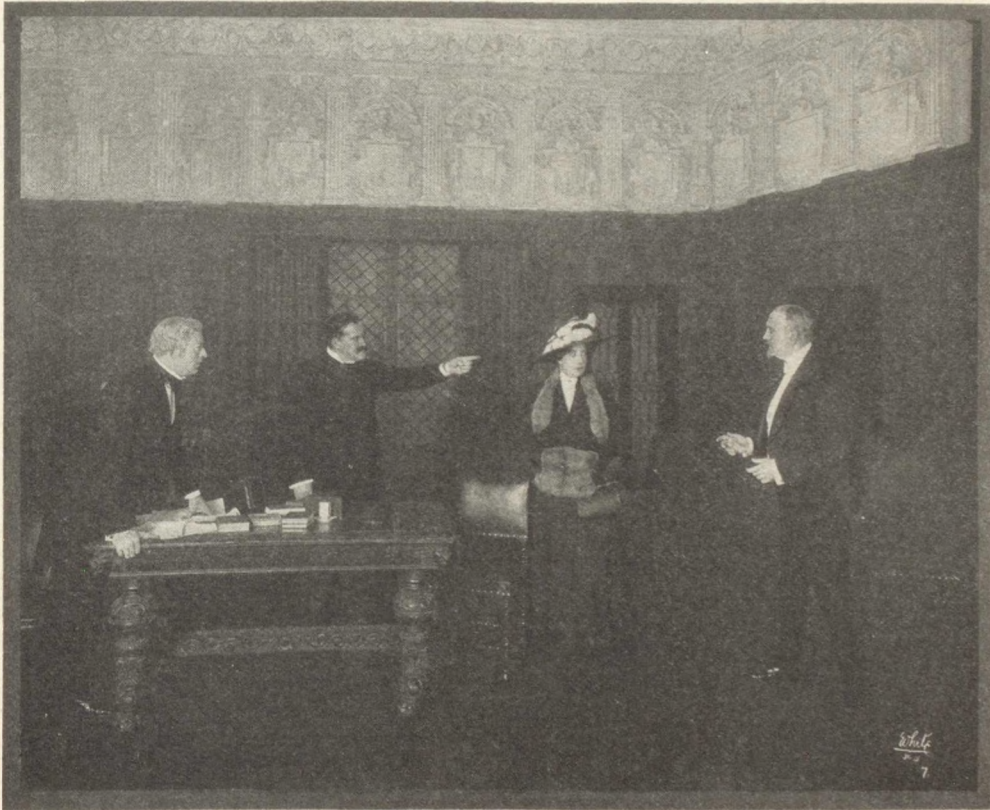
This psychological condition is due to the fact that a play always draws attention away from cold reasoning into that attitude where the senses and the feelings, in combined action, hold full sway.

Where the emotions are aroused and the senses made specially active, the mind invariably becomes highly susceptible to suggestion. And here is a great secret in practical psychology. If you wish to suggest something to someone, present your suggestion in such a way that you increase the activity of his senses, and

arouse his emotional feelings at the same time. If you can accomplish these two things simultaneously, your suggestion will take effect without fail.

The majority of the lasting impressions received by the average person come to him, not through his intellect, but through his emotional nature and his imagination. It is not what we *think*, but what we *feel*, that makes us act one

tion; nor will he find desirable plays to be scarce or far between. Such plays as "The Climax," "The Melting Pot," "The Gentleman From Mississippi," "The Lion and the Mouse," "The Witching Hour," "The Servant in the House," "The Third Degree," "The Dawn of a To-morrow," have a powerful influence in the right direction. Besides, they are all intensely interesting and entertaining. And the



"The Third Degree," Act III

Police Captain Clinton vows he will capture the "mysterious woman"

way or another. And we mentally *feel* nearly everything that takes place behind the footlights. That those feelings should work themselves out, wholly or in part, into actual conduct is, therefore, most evident. And it is also evident, for the same reason, that those who attend theaters should select only plays that arouse their feelings in the right direction.

For the theater-goer to make this right selection will not be difficult when he understands the laws of mental sugges-

tion. The same can be said, in a lesser degree, about the better class of musical comedies. Such entertainments not only furnish restful and refreshing diversions for the mind, but they produce a general effect that is beneficial.

Many a person who has witnessed "The Lion and The Mouse" has received such a powerful stimulus in the increase of his will and determination that the good effect will last for years, possibly for life. Other plays by the score could be men-

tioned that tend to heighten the activity of one or more of the mental faculties. And this is one of the important values of a good play. When the natural actions of a faculty are increased and the function of that faculty idealized, the mind is taken up out of its usual groove, and is thereby actually made superior to what it was. It is therefore evident that regular attendance upon good plays may become a direct means for assisting an ambitious mind in reaching the greater goal he has in view.

A Strange Comparison

It is a fact, universally recognized among psychologists, that the channel through which the theater exerts its suggestive influence is almost identical with that of the old-fashioned revival meeting. This statement may not seem complimentary to either party concerned, nevertheless it is true. The same intense interest is there; the same concentrated attention is present, and the same appeal is made to the emotions and the imagination. The psychological conditions are very similar in many ways, but the theater has the advantage, for its appeals are made, not only to the ear, but also to the eye.

Those attending a play not only hear things which stir their feelings, but they also *see them portrayed* in a most realistic manner. Instead of depending upon the power of the speaker as an aid to the visualization of the scene, the theatergoer has the scene actually visualized before him, almost as in real life. One has but to witness the conduct of an audience attending some emotional play to realize the powerful influence it possesses over the minds of those present. As an instrument for the impression of mental suggestions, the theater is without an equal.

From the earliest times the effect of plays over the public imagination and conduct has been recognized. In former days the clergy favored and encouraged the presentation of the old Morality Plays, which conveyed lessons in morality in an attractive guise. In the early periods of church history, plays similar

to the celebrated "Passion Play" were presented to the congregations, and an increased degree of piety was found to result therefrom. The people who saw, with their own eyes, as if in actual life, the great occurrences related in the Scriptures, were impressed in a manner far more forcible than that of the mere reading of the books or the preaching of sermons thereon.

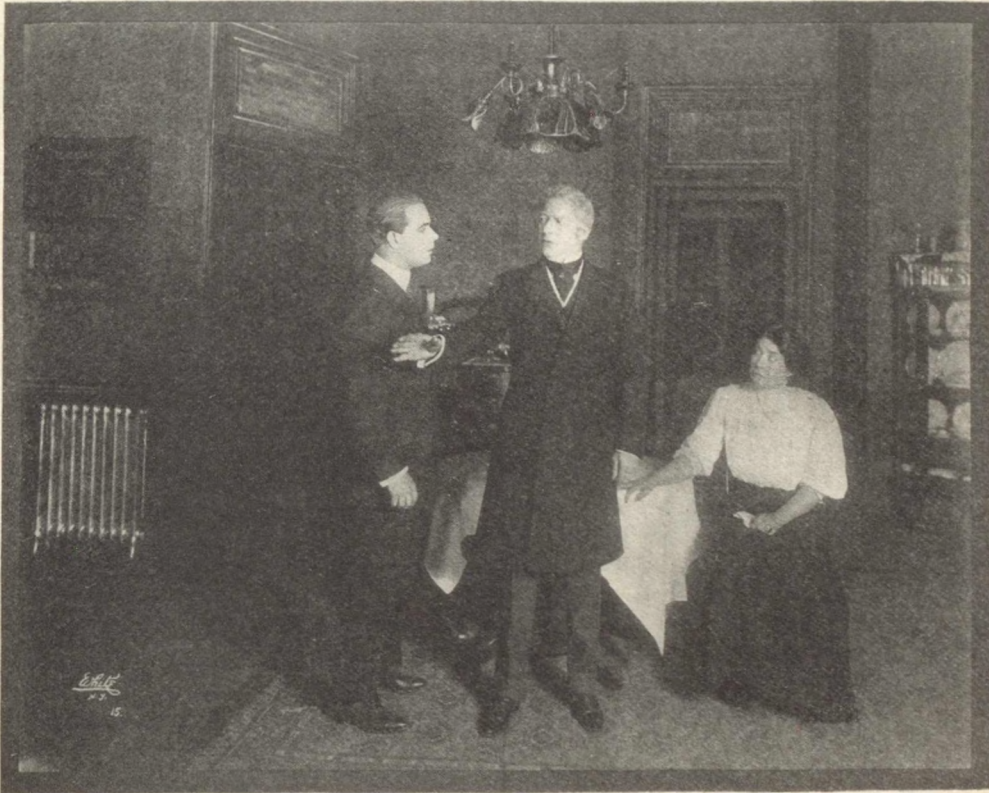
Even in this day, I have known cultured people who have reported that the witnessing of the "Passion Play" produced in them feelings of awe and religious emotion which they had never before experienced. The picture of Calvary ever after stood out in the minds as a *reality*, instead of a mere matter of belief. I know a lady, educated and cultured, whose entire life was changed by the witnessing of a play in New York City in which the voice of the Son of Man was heard arising from a garden out of sight of the audience, as he addressed the rabble who had gathered around the woman detected in her sin, and whose death by stoning they demanded. She stated that the sound of that voice of the unseen Teacher, vibrating with force and power, rebuking the crowd with its words: "Let him who is without sin cast the first stone!" caused her to realize the life of the unfortunate woman so forcibly that her entire life was thereafter devoted to the work of relieving her distressed sisters, and helping them toward a better life. Surely the suggestion of this play must have been very powerful to have awakened an interest which had not been aroused by previous years of experience and reading.

Effect of Various Plays

Those of our older readers who witnessed the play of "Uncle Tom's Cabin," during the times of the Civil War, need no further proof of the suggestive power of a play. Thousands of people witnessing this play became so filled with the hate of the institution of slavery that their influence was thereafter directed toward its suppression. It does not alter the case to assert that this particular play was overdrawn or was not true to facts—

it might have been entirely untrue, for that matter, without affecting the principle of the suggestive influence of plays. Twenty years or more ago it was the fashion to present temperance plays, such as "The Drunkard's Home," in this country. While the majority of these plays were devoid of dramatic merit, and were mostly maudlin, nevertheless they had a powerful effect upon the minds of thou-

sonal observation, was that of a young man who was on the eve of yielding to a strong temptation, who was brought to a realization of his real peril by witnessing a play in which the leading character, suffering from remorse, cried aloud in his agony of mind: "Oh, God! Turn back Thy universe and give me my yesterday!" A thousand volumes of books—a thousand sermons on Remorse, could not have ac-



"The Third Degree," Act IV

Mr. Brewster gives Mr. Jeffries, Jr., a few words of advice

sands who witnessed them; and many were induced to abstain forever from liquor after witnessing the portrayal of the squalid home of the drunkard, and the death of his starved child.

I personally knew of a particular case in which a young libertine was so affected by the portrayal of the ruin of Marguerite in the play of "Faust" as presented by Morrison, that his whole life was changed for the better from that date. Another case, also under my per-

complished what was wrought by this picture of a strong man, in the agony of Remorse, calling upon the God of Days to turn back the infinite universe that he might regain the lost Yesterday and undo his wrong.

Patriotism has often been aroused by plays calling forth feelings of that kind by a representation of scenes of the past in which one's forefathers were pictured battling for their homes and liberties. We have seen staid old men spring from

their seats with excitement over some thrilling picture of patriotic performance and action. One has but to recall the fact that only a few months ago all England was set afire by the presentation of a play entitled "An Englishman's Home," in which was pictured the invasion of England by a foreign foe. Probably no case in modern history equals this occurrence. From the throne down to the gutter, every Englishman was aroused by this play, and the pulse of patriotism in England beat at a rapid rate by reason thereof. The fact that the play failed to attract attention in other countries, when presented there, only emphasizes the fact of its suggestive value in England. It was presented at the psychological moment—the suggestive conditions were present—and it was like applying the spark to the powder of the public mind.

Students of public events realize the important part played by theatrical performances in times of national crises and critical moments in the progress of affairs. In fact, these conditions seem to evolve plays calculated to bring out the public feeling, just as revolutions are said to evolve their needed leaders in many cases, or popular movements their logical standard bearers. According to the same law, it is held that successful plays represent the state of public opinion at that time, as well as intensifying the feeling of that opinion. A play may prove a failure one season and then rise to great success the next—something has happened in the public mind in the interval. Thus we see that it is a case of action and reaction—the demand evolves the play, and the play increases the demand. The play entitled "The Witching Hour," which is based upon Telepathy and similar psychological phenomena, was written a number of years before it was produced. The public was not ready for it, as all the managers and critics knew, and it was withheld until the public taste had been awakened along those particular lines. Then it was produced and sprang at once into popular success. And then began its suggestive effect—creating popular interest in those phases of psychology in a manner never before known. Attention

was directed toward the subject; the papers discussed it; people began to read up on the subject, and an impetus was given toward the study of certain phases of psychological phenomena which will bear fruit for several years to come. It is interesting to note, in passing, that this particular play taught a valuable lesson on the subject of Mental Suggestion which should be heeded by the public.

How It Works

In order to understand the nature of the operation of Mental Suggestion in the Theater, we must take a backward glance at the fundamental principles of suggestion, as presented in the opening pages of this article. In the first place, we see that the method of impressing ideas upon the mind in the Theater is essentially suggestive, from the fact that no attempt is made to *argue* the case, or to convince the audience by logical means through the intellect or reason. On the contrary, the ideas are impressed indirectly by subtle suggestions or insinuations. The audience *sees* the introduction and working out of certain ideas, as in real life, and according to the art of the playwright is impressed thereby. In order to convince a person by argument that a certain course will result in a stated effect one must bring forth logical proof accompanied by illustrations within the experience of the person addressed. The appeal is to the intellectual faculties, and the logical processes must be observed. On the stage, the contrary is true. The audience sees a certain course of action working out in the shape of certain results, and if the work be cleverly done the audience accepts it as a matter of course, and does not notice that the result is illogical or contrary to reasonable experience.

The fundamental principle of suggestive methods is that they insinuate or subtly and indirectly introduce the idea into the mind, and the methods of the theater are directly upon these lines. The best proof of this is the well-known fact that the majority of plays are not true to real life, although the audience does not realize it during the progress of the

play. The characters usually act, talk and live far differently from their prototypes in real life. There is a certain glamor arising from the footlights which seems to make the unreal seem real, and the real unreal. A scene in which the characters would act exactly as they do in real life would fail to interest the public—the truth must be idealized for them.

carefully rehearsed, and always with an eye to the artistic and dramatic effect. It is the same artistic tendency that operates to make a painting appear more beautiful than the scene which it portrays. It is the artistic impulse toward idealization. On the stage we see the ideally good, and the ideally bad, instead of the real. The heroes and heroines are never met with in real life, and as for



Scene from "The Witching Hour"

We hear of many plays which are pronounced "true to life" by those attending them, and at first glance this seems to be so. But if one critically analyzes and dissects these plays he sees that the whole action is artificial and designed with an idea of dramatic effect rather than fidelity to nature. People in real life do not, as a rule, talk as do the characters on the stage. The cleverly designed speeches are not heard off the boards. The apparently natural actions have all been

the impossible villains—well, they *are* impossible in truth.

We mention the above facts, not in the way of adversely criticizing these facts—a play would not be interesting if it were not idealized—but simply to bring out the fact that this idealization gives the play exceptional power in conveying mental suggestions, good or otherwise. Idealization acts upon the imagination and causes the audience to live in a world of dreams—a world in which everyday reason has

but a small place. The audience, giving free rein to its imagination, places itself in a suggestible condition, as all psychologists know. In this condition every suggestion has an exaggerated effect, and it is a mere trick of the playwright to make the unreal seem real to an audience in this condition. People fall into this state, in many instances, when they listen to beautiful music, or the lines of a master poet. The action of a play is akin to poetry in its idealization and appeals to the emotional nature. And the music heightens the effect.

Some Remarkable Results

We have seen that a suggestion has an increased effect if received through the medium of both eye and ear; and this condition exists in the theater. Not only do the characters speak as living beings, and act as living beings, but the scenery is all nicely calculated to heighten the suggestion and to make the ideal seem real. An artist-manager like Belasco studies for months over the little details of the "atmosphere" of the play, until he has built up a vehicle of suggestion which appeals to the imagination in a thousand ways. The appeal is never to the reason, but always to the feelings, and the imagination. So cleverly is this done that the missing details are often actually supplied by the imagination of the audience, acting under the influence of the suggestions conveyed in the play. I remember a couple of amusing instances of this kind in my own experience. Several years ago, in a play in which the scene was laid in the far South, the curtain rose on a beautiful garden surrounding an old mansion. Trees with drooping foliage were grouped around in artistic order, and the Spanish moss was seen trailing from their limbs. The very air seemed soft and balmy, and when one of the characters remarked, "How fragrant is the odor of the magnolias stealing toward us from over the pond," the audience began to sniff and actually recognized the odor of that fragrant flower. The impression was so real that even the old hardened playgoer was deluded. It is said that cheap imitators afterward re-

sorted to the practice of spraying extract of magnolia from the sides, but in the original production the strong suggestion of the words and the scene were sufficient to create the illusion. In another play the heroine attempted suicide by turning on the gas. The actions and the words actually created the suggestive effect of the odor of escaping gas, and some women in the audience felt faint. In another play the cleverly devised scenery and the use of a few penny whistles produced the effect of the glorious song of the mocking-birds in the Southern forests. The clever setting of a scene is suggestion, first, last and all the time. An understanding of this fact is the secret of the art of Belasco, who is probably without an equal in this respect. He is a past-master in the use of artistic suggestion.

In the effect of the suggestion of the stage upon the audience, the various forms of Mental Suggestion must be considered. In the first place, the Suggestion of Authority is manifest. The characters utter sentiments with an air of authority, which carries weight with it. Statements which would not stand the scrutiny of logical analysis are accepted without a protest. Fallacies, casuistical reasoning and sophisms pass muster as self-evident truths. Then the Suggestion of Association is manifest. We see certain characters acting in certain ways under certain circumstances, and we naturally associate character, condition and action in our minds. Young people, particularly, are impressed by this form of suggestion on the stage. They see certain people doing certain things under certain circumstances. They have never seen the circumstances arise in their own experience, and they have no idea of how they would act under them. But the association once established, by reason of the stage representation, the appropriate action naturally follows if like circumstances arise in the lives of the young people. Young girls often obtain entirely distorted ideas of behavior with their lovers, by reason of certain scenes in plays they have witnessed. It looks like real life to them, and the idealization adds a glamour—it is very easy for the association to repeat itself in real life. Young

lads witnessing cheap melodramas often gain entirely erroneous ideas regarding the use of deadly weapons by reason of the associated suggestion.

When circumstances and actions become associated in the mind, a natural mental path is made from one to the other, which the will finds easy to travel over in moments of emotional excitement. The Suggestion of Imitation is equally apparent. It needs but little argument to prove that people are naturally imitative, and have a tendency to re-enact that which they frequently witness. Many a stage scene has been reproduced in real life, in at least some of its details, by reason of the operation of the law of Suggestion of Imitation. People often are attracted toward certain characters in a favorite play, and begin to imitate the appearance, ideas and actions of that character. Some people are so susceptible that for days after witnessing a play they may be seen manifesting some of the personal traits of some character thereof. Thus we realize that in every form of Mental Suggestion, the theater is found to exert a strong influence. So true is this that many of the best authorities on Mental Suggestion use the various forms of the suggestion of the play as examples in their treatises on the subject of Mental Suggestion.

Adverse Suggestion

In this consideration of the subject we have laid considerable emphasis upon the side of adverse suggestion; but simply because such emphasis aids directly in bringing out the several points more clearly. We are far from believing that the balance is on the side of adverse suggestion. Though we recognize the deplorable influence of a certain class of plays upon the public mind, we just as plainly recognize the favorable influence of certain other plays in the direction of making men and women better, stronger and truer to the highest ideals of the race.

Mental Suggestion, like any other great principle of nature, is capable of being used for either good or evil. And this

is especially true of that form of suggestion which is under present consideration—Mental Suggestion in the Theater. That this form of suggestion has been, and often is, used in the wrong direction is no reason why the theater should be condemned. We all know that the theater has a great future before it in presenting suggestions and examples of a favorable nature to the public. If the theaters were to produce only those plays which would tend to give forth suggestions of strength, courage, nobility and kindness, the desired effect upon the public would be simply remarkable. And this is no mere Utopian dream; is the truth as recognized by all students of modern psychology. As a medium of general uplift to the public the theater has a position second not even to the pulpit or the press. It is therefore unfortunate that the public does not recognize this fact more fully. In an ideal civilization the theater would be the source of some of the greatest inspirations to the race. It would have its recognized place as the mold of public opinion, and the pattern of public action.

Like the press, however, the theater cannot well rise above its source of income—public favor. The managers say that they give the people what they want—the same excuse that we hear from the newspapers. That is, in all probability, true, for the managers are as a rule closely in touch with the public taste; and while their productions influence the latter, nevertheless they also arise from a basic popular demand. This being the case, it would seem that all effort toward reform must be directed toward the education of the public in this respect. When a more general understanding of the powerful psychological influence exerted in the theater is attained, and we all realize what an exceptional instrument for good or evil is found in the modern play, then the great change will come. Then the theater will become what it has the power to become—one of the greatest factors in the world for giving happiness, strength, refinement, ambition and inspiration to the human race.

(Next Month—"Mental Suggestion in the Sick Room.")

INSPIRING STORIES OF GREAT MEN

Illustrating How Obstacles on the Road to Success Were Overcome

By EVERETT ELMORE



HOW wonderfully inspiring is the life on a successful man!

Shakespeare in his early days was inspired by the writings of Homer and Virgil and others of the great literary geniuses that preceded him.

Cromwell, on the other hand, sought courage on the eve of his battles from the writings of the inspired Shakespeare. Frederick the Great at the height of his glory was still an ardent disciple of Caesar.

Napoleon attributed his achievements to his study of the life of Alexander. Roosevelt, on the contrary, it has always been said, is an enthusiast on the subject of Napoleon and has become an authority on the great general's career. Admiral Dewey's victory at Manila Bay he himself attributed largely to his life-long study of the naval heroes, Nelson and Jones, while his youthful acquaintance with Farragut undoubtedly had an inspiring effect upon him. Lew Wallace, after he had finished his incomparable "Ben Hur," stated to those who knew him that he attributed its success to the fact of the inspiration he drew from the period of which it deals. Lincoln, in his classical address at Gettysburg, was undoubtedly inspired through his study of the great Pericles, a fact so marked that the orations of these men are remarkably similar.

And so it may be seen that the whole world, in its youth, is based on the power of inspiration. Both in the school and in the home the truth is always apparent.

The playground furnishes its Morgans and its Rockefellers, its Napoleons and its Nelsons, quite as readily as might Wall Street and West Point or Annapolis. That this is so can be proved from the effect of the Roosevelt administration upon the youth of America, a fact made noticeable by the strenuousness of the sports and pastimes indulged in during this period. But it must not be taken from this that the inspirational effect of a man's career culminates in a fad or a craze. If this were so the American nation of to-day, following the lead of its chief executive, would desert its business houses and go out onto the golf links. Such a result would be a "craze" and not an inspiration. But, on the contrary, if the American people were to draw from the life of their president the advantage derived from a thoroughness in all things, his life could then be said to be inspiring.

And so, in order to gain the greatest inspiration and the most lasting impetus from the lives of our successful men, it is necessary to draw from their careers the meat of their success. It is necessary to see them first in the crude and live over with them the early struggles through which they passed. It is necessary for us to see the obstacles and the discouragements which they faced before we can readily appreciate the lesson in their triumph. It is essential for us to see the rough boards of which they were made. In biographical accounts we are too apt to pass over these early struggles onto the smoother, oiled roads of success, and yet in so doing we lose the very factors that hold the greatest inspirational power for

us. In picturing Washington many prefer to look at his handsome, well-clothed army that accepted the surrender of Cornwallis rather than at the tattered, untrained line of minute men that answered to his first call. They prefer to picture him on the rose-strewn path to his first inaugural rather than as the heroic yet gentle figure that spread comfort among the suffering in those dark, agonizing days at Valley Forge. In a way these people are right—it is best to see the prettier picture. But without the power of contrast the inspiration of the lesson is lost. The strength of the writings of George Eliot lay not in the beauty of her English so much as in her gift of comparison.

It is necessary for this reason in studying the life of a successful man to analyze his character even before his deeds. It is more instructive to know *how* his obstacles were overcome than it is to be told that they were. One forms a lesson, whereas the other is but an item of news or of history, as the case may be. It tingles our patriotism to read of that memorable day at Appomattox when two of the most virile men of their age met for the purpose of mutually agreeing upon terms of truce. And it impresses us wonderfully when we think of the noble figure of the South—Lee—humiliating himself finally to the enemy he had so valiantly fought. But to draw from the lives of Grant and Lee the fullest inspirational power we must look not to the scene at the famous courthouse, but to the cruder, less conspicuous work in the trenches and in the thicket of the weeks preceding. We must look back beyond the glare of the polished, glittering sword to the long marches and the nights of hunger. Then it is that the lessons in the lives of Grant and Lee stand out like milestones in the world's history. For it is then that we see *how* the ultimate triumph was accomplished.

It is with the hope of thus drawing from the lives of successful men of both this and other ages the greatest inspirational power they possess that it has been determined to present in this magazine a series of biographical studies in which it will be aimed to find the real kernel of

their success. It is the hope to pick out through minute study the obstacles which were faced and then to outline the manner in which they were overcome. There have been few great men in the world's history who passed through life without a struggle. But there have been a very large number of great men who not only knew how to get out and fight, but who also possessed the courage and stamina to do so and come out ahead. And it is from the lessons of these struggles that our greatest inspiration may be found. And it is the story of the fight as well as the triumph that we will endeavor to tell.

Stephen Girard

In casting about among the early figures in the history of America's industrial growth the name of Stephen Girard, the pioneer Philadelphia merchant, seems to loom up even more impressively, in the light of twentieth century methods, than it did a generation or so ago. Girard, in the beginning of his career, was a victim of circumstances if ever a man was. But he also had that superior faculty of being able to turn circumstance into the happiest of coincidences.

It was on a morning of May, in the year 1776, that a sloop, floating the flag of France and flying a signal of distress, arrived at the mouth of Delaware Bay. An American ship soon after, in answer to the signal, ran alongside the French vessel and found that its captain had lost his bearing in a fog and was in total ignorance of his whereabouts. His vessel, he said, was bound from New Orleans to a Canadian port, and he was anxious to proceed on his voyage. It was then that the American skipper informed him of his locality and also apprised him of the fact that war had broken out between the colonies and Great Britain and that the American coast was so well lined with British cruisers that he would never reach port but as a prize.

"What shall I do?" cried the Frenchman, in great alarm.

"Enter the bay and make a push for Philadelphia," was the reply. "It is your only chance."

The Frenchman protested earnestly that he did not know the way and had no pilot. The American, therefore, pitying his distress, found him a pilot and even loaned him five dollars, which the pilot demanded in advance. The sloop, after many miraculous escapes from capture, finally reached Philadelphia, and the captain, realizing his predicament, sold his cargo and embarked, in a modest way, as a grocer and wine-bottler on Water Street.

His capital was small, his business trifling in extent, while he himself labored under the disadvantage of being almost unable to speak the English language. In person he was short and stout, with a dull, almost repulsive countenance, which his bushy eyebrows and solitary eye (he being blind in the other) made almost hideous. He was cold and reserved in manner and was disliked by his neighbors, the most of whom were afraid of him. This man was Stephen Girard, who was afterward destined to play so important a part in the history of the city to which the mere occurrence of war led him as a stranger. Girard was born in Bordeaux, France, May 21, 1750, and was the oldest of the five children of Capt. Pierre Girard, a mariner of that city. But with the early life of Girard we have little concern beyond the fact that home circumstances early led him out to sea. On the sea, however, he rose rapidly and quickly advanced from the position of cabin boy to that of mate. During this time he improved his leisure moments by extensive study, the facilities considered, which soon won for him not only a reputation as a master of navigation, but also of being unusually well informed. So proficient, in fact, did he become in the art of navigation that he secured the command of a vessel, notwithstanding the laws of France, which prohibited a man of his age from commanding. Gradually Girard, always saving in disposition, amassed a small fortune, which he invested in cargoes easily disposed of in the ports to which he sailed. It was on one of these missions, at the age of 26, that circumstances led him to Philadelphia.

From the time of his arrival in Philadelphia he devoted himself to business with an energy and industry that never

failed, for Girard, first and foremost, was a man of inexhaustible energy. He despised no labor and was willing to undertake any honest means of increasing his subsistence. He bought and sold anything, from groceries to veritable junk, believing that so long as he dealt fairly and squarely with his fellow man any branch of the trading life was legitimate. He was possessed also of an unusual amount of courage, which his initiative faculty only accentuated. From the very start, with his strength and conviction behind it, his business prospered and Girard was soon recognized as a thrifty merchant.

But in the very midst of his successful climb it seemed fitting that Girard should have been tested in the severest way. In 1777 he married, but the union was an unhappy one. It is unnecessary to go into the details of the many cares and trials that swept in upon him. But it is appropriate, in weighing the real fortitude and courage of Girard, to say that few men have suffered more. In the same year the approach of the British caused Girard to flee Philadelphia, and he removed to Burlington, N. J., where he carried on his business by shipping his wares to Philadelphia.

The evacuation of Lord Howe in 1778 allowed Girard to return to Philadelphia, where he took the oath of allegiance required by the state of Pennsylvania. The war almost annihilated the commerce of the country, which was slow in recovering its former prosperity, but in spite of this discouraging circumstance Girard worked on steadily, scorning no employment, however humble, that would yield an income. Already he had formed the plans which led to his immense wealth, and he was now but patiently carrying out the disheartening preliminaries. He was combining the inspiration his dreams gave him with the cold reality of the times. His gains were small, but so clever in business was the man that whatever he undertook prospered.

Stephen Girard knew the value of little things and he knew how to take advantage of the most trifling circumstance. His career, in so far as the proper appreciation of the value of small things is concerned, is more than inspiring.

In 1780 Mr. Girard again entered upon the New Orleans and St. Domingo trade, in which he was engaged at the outbreak of the revolution. He was very successful in these ventures and was enabled in a year or so to greatly enlarge his operations. In 1782 he took a lease of ten years on a range of frame buildings in Water Street, with the privilege of a renewal for a similar period. Rents were very low at this time, business being prostrated and the people consequently despondent. But Girard, looking far beyond the present, saw a prosperous future. He was satisfied that it would be but a short time before Philadelphia would be restored to its former commercial importance, and he was satisfied his leases would prove the best investment he had ever made. The result proved the correctness of his views. His profits were enormous.

Soon after this Girard entered into partnership with brother, Capt. John Girard, in the West India trade. But the brothers could not conduct their affairs harmoniously, and so in 1790 the firm was dissolved by mutual consent. Out of the profits from this short partnership, however, Stephen Girard took \$30,000 as his share.

Next we find Mr. Girard engaging himself extensively in the Chinese and East India trade. It was this move, perhaps, more than any other, that showed the great initiative and remarkable business sense of the merchant. He looked far across the seas and saw there the great market of the Orient. He saw also that this market could be captured, if properly handled. And so from his not over-large fortune he built a fleet of stanch sailing ships. At first his ships merely sailed between Philadelphia and the port to which they were originally destined. But Girard, ever alert to new undertakings, soon discovered that he could do better than this. And so loading one of his ships with grain, he would send it to Bordeaux, where the proceeds of her cargo would be invested in wine and fruit. These she would take to St. Petersburg and exchange for hemp and iron, which were sold at Amsterdam for coin. From Amsterdam she would proceed to China and India, and, purchasing a cargo of

silks and teas, return to Philadelphia, where the final purchase was quickly disposed of, invariably at a large profit. Thus Girard, entering a new market, became the first heavy importer of wares from the east. His success was uniform and was attributed by his brother merchants to *luck*.

Stephen Girard, however, had no faith in luck. He never trusted anything to chance. He was a thorough navigator, and was perfect master of the knowledge required in directing long voyages. He understood every department of his business so well that he was always prepared to survey the field of commerce from a high standpoint. He was familiar with the ports with which he dealt, and was always able to obtain such information concerning them as he desired in advance of his competitors. He was the first man who inaugurated the idea of gathering, by means of his own agents, information of benefit to his own business. He trusted nothing of importance to others. His instructions to the commanders of his ships were always full and precise.

Mr. Girard was not only rigidly precise in his instructions, but he permitted no departure from them. If loss came under circumstances where he might have been better had not his instructions been followed Girard assumed entire responsibility for it.

It was in 1812, however, that Girard came most prominently before the public. In this year Congress refused to renew the charter of the Bank of the United States, and so Girard, being its heaviest creditor, bought the bank out. Keeping all of the old employes, though at a reduced salary, he reopened the bank soon after under the name of the Girard Bank, with a capital of \$1,200,000. This capital he increased the next year by \$100,000 more.

Girard was hard and exacting in his nature and steadfastly declined to give to charity. But, on the contrary, he was a patriot of the highest school. Throughout the war of 1812 Girard aided the government substantially and more than once literally kept it supplied with the sinews of war. A year later, when the national treasury was in a depleted condition, he loaned the government \$5,000,-

000, after efforts to have it subscribed for elsewhere had failed. He was also instrumental in securing the establishment of the Second Bank of the United States and was its friend to the end, while, at another time, he aided the state of Pennsylvania by a large loan from his personal fortune.

The city of Philadelphia shared also in his patriotic beneficence, for Girard built many handsome business blocks and spent vast sums in the beautifying of her parks and streets.

By 1828 the wealth of Girard was estimated at \$10,000,000, and yet with this enormous sum he was content to live quietly and alone. He was feared by his subordinates, by all who had dealings with him, and liked by none. Yet he valued wealth, valued it for the power it gave him over other men. Under that cold, hardened exterior reigned an ambition as profound as that which moved Napoleon. He had no vices, no dissipations; his whole soul was in his business.

In 1783 the real fibre of which Girard was made was probably best shown. In this year a terrible yellow fever epidemic broke out in Philadelphia and the city was plague smitten. The hospital at Bush Hill was said by the city physician to be in a deplorable condition and volunteers were called for to put it in shape and serve as nurses. Two persons in the whole of Philadelphia responded to the summons. These were Stephen Girard and Peter Helm. The two were generally regarded as doomed men, but this fact dismayed neither of them. For sixty days Mr. Girard continued to discharge his duties, never absenting himself from his post. Twice more, on the occasion of two other epidemics, Mr. Girard served the city heroically and fast lived down the prejudice that had been engendered against him.

To the last he was active. His success kept growing and enlarging all the time, but still Girard kept on working. When not engaged at his office he got out and pitched hay on his farm. In 1830, having reached the age of 80, he began to lose the sight of his eye, and was a short while later run down by a wagon and severely injured. But notwithstanding his

injuries Girard was up and about the next day with a strenuousness fully worthy of him. But his health declined rapidly and on the 26th of December, 1831, he died in the back room of his plain little house in Water Street. In his will Girard surprised all of Philadelphia by the magnificence of his benefactions. His immense wealth was carefully divided and few institutions of worth were forgotten by him. His greatest gift was the sum of \$6,000,000 for the endowment of the noble college for orphans in Philadelphia, which bears his name.

A man of steel Girard undoubtedly was, but surely few lives have furnished a more inspiring lesson of the value of energy and honesty and thoroughness in all things attempted than has his. This far at least the name of Girard will send down its lesson for many more generations to come.

Alexander T. Stewart

It was in the year 1818 that a small European vessel, after a long and weary voyage from the old world, dropped anchor in the harbor of New York. She brought many passengers to the young metropolis, the majority of whom came with the idea of seeking fortune in the "new country." Among them was a young Irishman, who had left his home in his native land to seek in America the means of bettering his condition. This was Alexander T. Stewart. He was the son of Scotch-Irish parents and was born in Belfast in 1802. Stewart had been trained, in his boyhood days, for the ministry and did well in his preparation for it, but he steadfastly believed that preaching was not his natural calling and so, having matured, he determined to give up the pulpit and seek his fortune in America. He came sufficiently supplied with ready money to insure him against immediate want and with letters of introduction which secured for him social position. After trying in vain to secure employment in a business house, he obtained a position as assistant in a commercial school. This he soon resigned for a similar position in a more celebrated school.

His salary here was \$300, which was considered ample in those days.

Not wishing to continue in this career, however, he opened a small retail dry goods store in New York and began business on a humble scale. Here he remained until the age of 21, doing a small but successful business. A year later he returned to Ireland to look after the inheritance left him by his grandfather. The amount which came to him was nearly \$5,000, and the greater part of this he invested in "insertions" and "scollop trimmings," which he shipped to America by the vessel in which he also returned. He rented a little store upon his return at 283 Broadway and there displayed his stock, which met with a ready sale at a fair profit. Without mercantile experience and possessing little advantage save his own Scotch-Irish energy and courage, Mr. Stewart started boldly on what proved to be the road to fortune. No young merchant ever worked harder than he. From fourteen to eighteen hours each day were given to his business. He was his own bookkeeper, salesman and porter. He could not afford to employ help. Credit was hard to obtain in those days and Mr. Stewart was one of the least favored, inasmuch as he was almost a total stranger to the business community in which he lived. He kept a small stock of goods on hand, which he purchased for cash, chiefly at auction sales. He was a regular attendant at these sales and his purchases were invariably "sample lots"—that is, collections of small quantities of various articles thrown together in confusion and sold in heaps for what they would bring. He had these purchases conveyed to his store, and, after the business of the day was over, he and his wife would take these "sample lots," and, by carefully sorting them, bring order out of the confusion. Every article was patiently gone over. Gloves were redressed and smoothed out, laces pressed free from the creases which careless bidders had twisted into them, and hose made to look as fresh as though it had never been handled. Each article, being good in itself, was thus restored to its original selling value. The goods were then arranged attractively, and as they

were offered at a cheaper price than was evidenced elsewhere were quickly disposed of. And yet even at the small prices asked the profit was great, since they had been purchased for a mere trifle. For six years Mr. Stewart conducted his business in this way, although he acquired constantly a larger and more profitable trade. Here he laid down those principles of business and personal integrity from which he never departed and which led to the high position he ultimately assumed.

His first rule was *honesty* between seller and buyer, his life being an exemplification of Poor Richard's maxim: "Honesty is the best policy." His interest consoorted with his inclination, his policy with his principles, and the business with the man, when he determined that the truth should be told over his counter, and that no misrepresentation of his goods should be made. Following this rule, Stewart, single-handed, soon raised the moral law of trading to a high standard in Philadelphia, by literally forcing his competing merchants to assume the same policy.

A second innovation of the young dry goods dealer was the selling at *one price*—a custom which has also spread to all the great business houses since his day. He fixed a price he felt was equitable and just and he abided by it without favor.

The third principle he adopted was that of *cash on delivery*. It is said that his own early experience in buying on credit, and selling on credit, drove him to this rule.

A fourth principle with Stewart was to conduct his business *as business* and not as sentiment. His aim was honorable profit and he had no desire of confusing it by erroneous considerations.

While still engaged in his first struggles in his little store, Mr. Stewart was called upon to make arrangements to pay a note which would soon become due. He had neither the money nor the means of borrowing it. It was, too, at a time in America's business history when it was considered a serious offense for a merchant to fail to meet promptly his obligations. Stewart knew that he would be ruined should he fail to meet his paper. So he boldly marked down every article in his store considerably below the wholesale

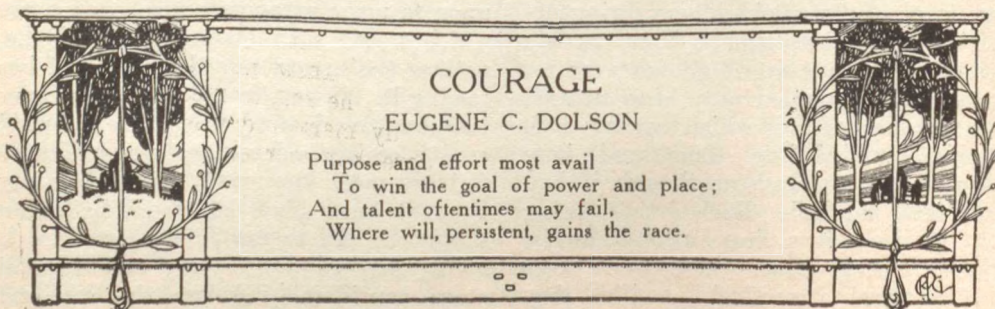
price. He then had hand bills printed and circulated throughout Philadelphia announcing a date upon which he would dispose of his entire stock. On the day of the sale throngs passed through his store all day, his note was safely met, and a handsome profit was realized, with which he bought a new stock. A few years later—six since his commencement of business—Mr. Stewart was forced to lease larger quarters on Chambers and Warren streets. Two years later he leased a large two-story building, having been forced out again through the growth of his business. But even these larger quarters failed to meet the demand and so a few months later a third move was made, a three-story building being leased. A year later (1835) another story was added, while in 1837 a fifth story was also built, so rapidly did he prosper. The great crisis of 1837 found Mr. Stewart a prosperous and rising man, and that terrible financial storm which wrecked so many of the best of the city firms did not so much as leave a mark upon him. Indeed, while other men were failing all about him, he was coining money.

Stewart, seeing the panic coming, marked down all his goods as low as possible and began to "sell for cost," originating the system which is now so popular. The prices were very low and the goods of the best quality, so that the people—suffering from the hard times—were glad to avail themselves of "Stewart's bargains."

From that time on his march to fortune was uninterrupted and store followed store

in his effort to find space adequate to meet his increasing trade, until—at last—Mr. Stewart became recognized as the merchant prince of America. It is said that Mr. Stewart regarded himself as a child of fortune rather than one who had risen by the force of his own genius. But if any one thing contributed to his success more than another it was found in his remarkable, inexhaustible energy. Mr. Stewart was one of the hardest workers in his establishment. His eye was on everything. He was familiar with every detail, though he did not take upon himself its direction. Unlike his predecessor, Girard, Stewart was liberal in his donations to charity throughout his life and earned a fitting title as a great philanthropist. He shunned politics except for the memorable occasion when President Grant offered him the portfolio of Secretary of the Treasury in his cabinet. This position, however, he ultimately declined, there being in existence an ancient law which prohibited the naming of a merchant as the head of the Treasury Department. Mr. Stewart's greatest single benefaction was to the sufferers of the Chicago fire, to which he donated \$50,000. During his last years—for Mr. Stewart died in 1876—he gratified his literary, artistic and social tastes, becoming one of the most sought out men in New York.

Many men since his time have accumulated greater fortunes than did Stewart, but surely none has sent down to posterity a more inspiring story of honest achievement.



REPEALING OF NATURE'S LAWS

By MARION M. DANA

HOW do you look upon this something we call "nature," especially with regard to its relation to yourself? Do you consider everything in nature a cause, or do you view some of it as a result of your own thought and action? The way you answer these questions will make a vast difference in your practical life, both as to achievement and personal welfare.

One reason why mankind has not made greater progress is because of its fatal belief in the supposed authority of nature and its submissiveness to a number of so-called "natural" laws, which are in reality no laws at all, but simply formulas of popular belief.

Consider, for example, the matter of physical and material conditions. Until very recently the majority have believed most religiously that it was "natural" to be sick, and, in consequence, made only a half-hearted effort to remove the cause of pain and disease. Suffering was looked upon as an inevitable event in the cycle of human affairs. It was part of nature's plan. So they believed; therefore, the possibility of complete emancipation was as far from their thought as the idea of wireless telegraphy was a few years ago.

The same belief was held, and is still held by many, with regard to old age. "It is natural to grow old." That was the authoritative statement made on every hand. But is it true? The more we study nature the more convinced we become that it is natural to stay young. At any rate, we cannot find a single law in nature that tends to produce age in anybody or anything. What then must be our conclusion? We see old age all about us. But what is the cause? Sickness comes from the violation of natural laws. Is it not possible that old age comes in the same way?

When we look into the world of human

thought concerning character, personal achievement, mental possibility and similar factors, we find scores of the same "natural" laws. Man-made all of them; and made, not in man's wisdom, but in his ignorance, and in the darkness of his experience. These "laws" are the results of numerous observations in various times and places, and have finally come to be considered fixed.

The prevalence of such "laws" is well illustrated in every-day speech. Thus we hear it said that this man has "natural" talent, while the other is "gifted" by nature. Here is a man "born" to be dull, stupid, unsuccessful; over there is one who is "created" for great things. Now we find a child that is "naturally" strong, robust, sweet-tempered and the like; and here again is another "naturally" the opposite. One man is said to be "made" to be a hewer of wood, while beside him is one whom nature has chosen to be a leader of men. We hear the same ideas expressed with regard to races. The Caucasian race is always spoken of as "naturally" superior; the Ethiopian, on the other hand, is said to be "by nature" inferior.

But what are the facts in the matter? Does nature make some men greater than others? And if not, why do some possess talent, while others are totally useless and unfit? That nature makes a discrimination no one can prove, but anyone can prove that it is man-made conditions that determine these discrepancies. The fact that ambitious minds can develop talents far beyond what is usually considered remarkable proves that nature does not determine what each individual is to be. She gives all minds the same possibilities, and it is for each individual mind to make all those possibilities count in his life.

The fact that a person comes into the world with certain powers, with certain conditions or with certain tendencies does not prove that he is "naturally" born that way and will have to remain that way. If these tendencies are bad, he can remove them; if his powers are limited, he can increase them; if he is burdened with certain undesirable conditions he can cast them off.

One of the greatest uses of this "natural" argument, or "biological," as it is sometimes called, is in relation to sex, and its division of labor and privileges. Women, the learned ones inform us, are so fashioned physiologically that they are naturally fit only for motherhood and domestic duties. Any infringement that women may make upon man's "natural" sphere, we are told, may result in deranged nervous systems or other special punishments that nature may devise, or even in the downfall of the entire race.

Other instances could be enumerated almost without end, for the fact is that human thought is literally full of these "natural" laws. If we eat certain things it is "natural" to get a pain. If we sit in a draft it is "natural" to get a cold. If we sleep ten minutes too long, it is "natural" to wake up stupid. If we don't sleep enough, it is "natural" to be weak and incompetent all day long. If we work a little more than we think compatible with our capacity, it is "natural" to feel tired. After we work a certain number of years, it is "natural" to wear out. When we reach a certain age, it is "natural" to lose our memory, our mental power, our virility, our vigor and our vim. All these things, and a thousand more, are supposed to be natural. But are they? We go through life perfect slaves to the mandates of these so-called "natural" laws, when the fact is they are nothing more than a bad mixture of habits and illusions.

We can all think of a number of cases from every-day experience where these dogmatic statements concerning nature's infallible decrees lord over us with absolute authority. But how silly we must feel when we discover that these "mighty decrees" have no more reality than the "ghosts" we imagined we saw in the

bushes as our childish minds were confronted with the silent darkness of the night.

To be valid, a law must always hold under the same circumstances; but this constancy is never found among the so-called "natural" laws. And it is this fact that has caused investigators to discern the difference between the real laws of nature and that bundle of man-made laws that are spoken of as natural for no other reason than this, that our forefathers spoke of them as such. But the sheep and the goats are being separated. We are beginning to discard our illusions, and we are learning to use the real laws of nature in overcoming what we do not want, and in moving forward, steadily and surely, into everything we do want.

We have recently discovered that sickness is not natural. And modern science is fast making "useless old age" anything but respectable. Fifty years ago advanced thinkers began to feel ashamed when they were sick; now there are thousands who would feel ashamed if they should find themselves growing old. We are beginning to learn that the real laws of nature make for health, youth, happiness and a long life; and we feel guilty when we are threatened with the loss of these things; we know we have done wrong; we no longer blame nature, Divine Wrath or Providence; we only blame ourselves, and we are ready to do anything to make amends.

We are constantly face to face with the fact that races as well as individuals that seem headed a certain way frequently turn around and do the unexpected in the way of achievement. We can think of scores of such individuals this minute. Among nations, Japan is an illustration; and there are more to follow. The blacks may yet turn the tables upon the whites. The whites must not be too sure of their "natural" right to superiority. If they wish to remain superior they must merit superiority, but the superior man never looks "down" upon anybody. Nor does the man who aims to become superior continue to enslave himself to all the man-made "natural" laws and illusions that we have inherited from the dark ages.

(Continued on fourth page following)