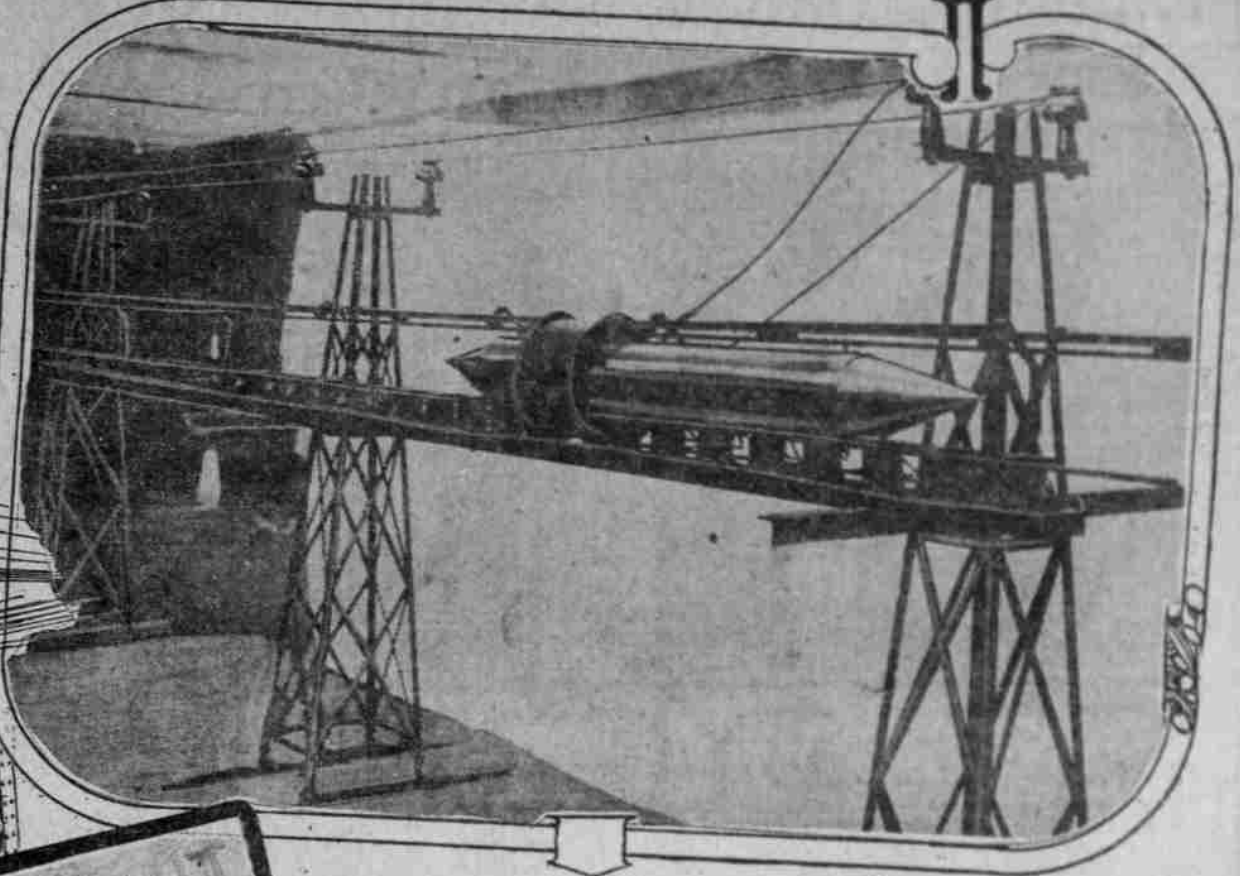
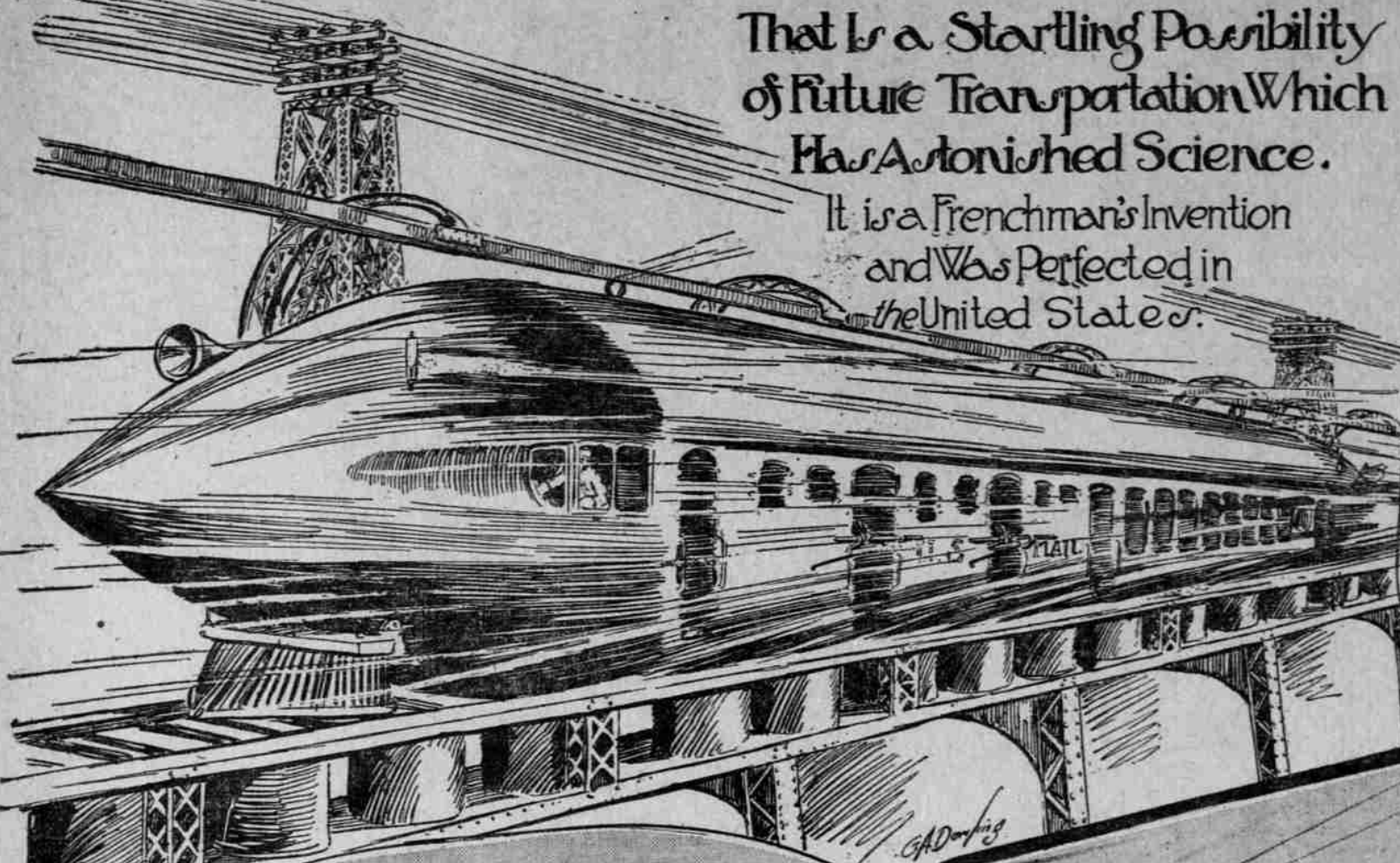


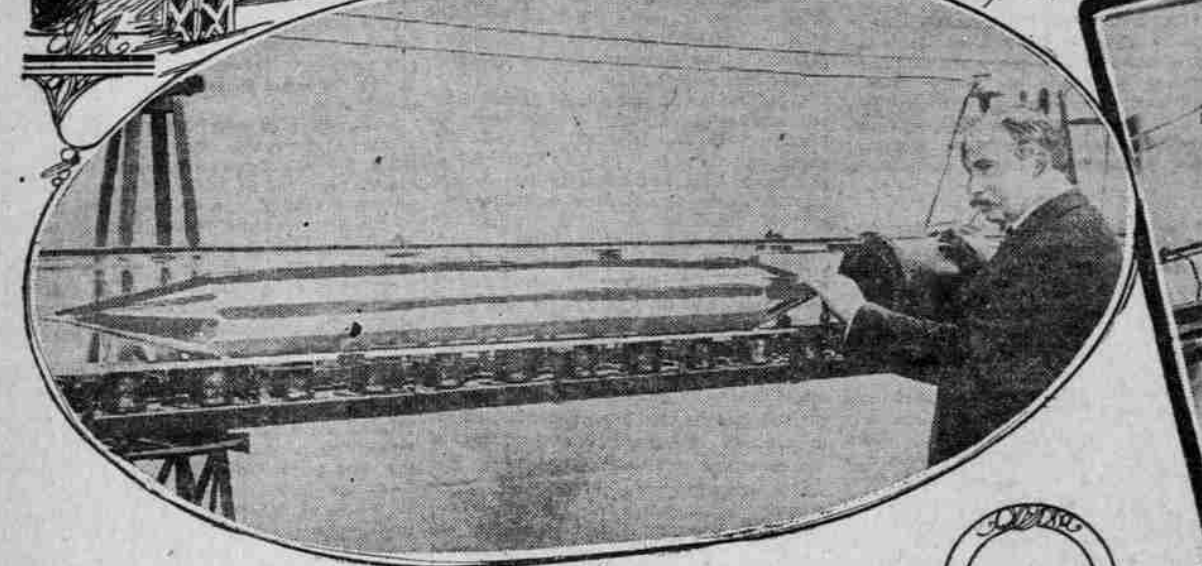
# TRAINS 300 MILES AN HOUR: WAVE CUSHIONS for TRACKS

## That Is a Startling Possibility of Future Transportation Which Has Astonished Science.

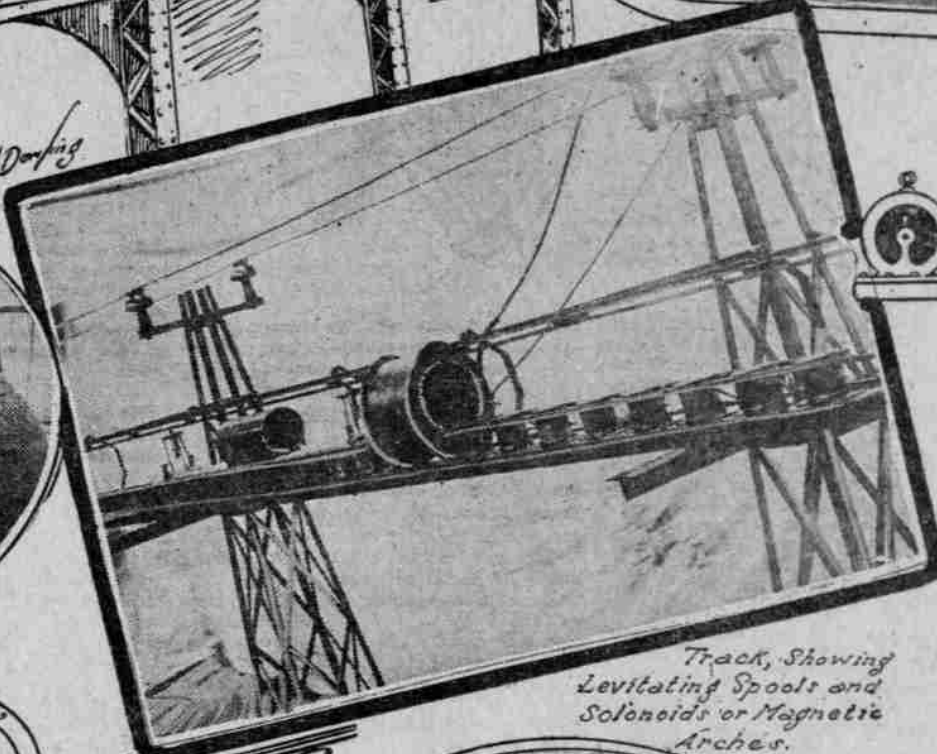
### It is a Frenchman's Invention and Was Perfected in the United States.



The Model in Action



M. Bachelet, the Inventor, with Model Car



Track, Showing Levitating Spools and Solenoids or Magnetic Arches.

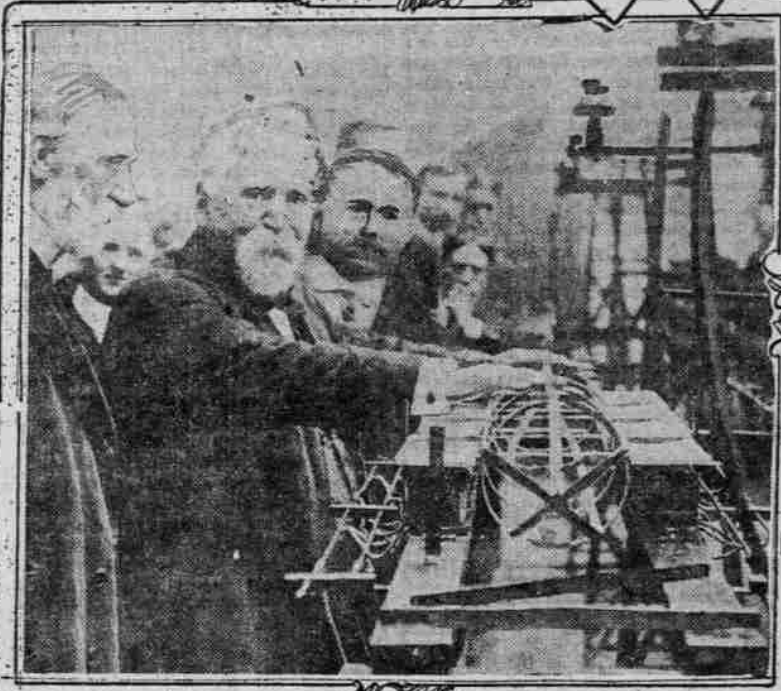
(Special Correspondence.)  
**L**ONDON, England, June 11.—Monsieur Emile Bachelet, with his new levitated railroad, has astounded the scientific, military and political world of England. The high priest of science, the lords of the admiralty, members of the house of peers and of commons have in turn visited the workshop, where this 10th wonder of the world is on exhibition, and they are amazed at his "flying train." They have marveled, too, how the United States, the motherland of the ingenious, has let this uncanny product of the scientific imagination leave its shores.

The levitated railroad is declared the latest work in transportation. A train traveling 300 miles an hour! That rate should satisfy the most rabid of speed maniacs from New York to Chicago in about three hours!

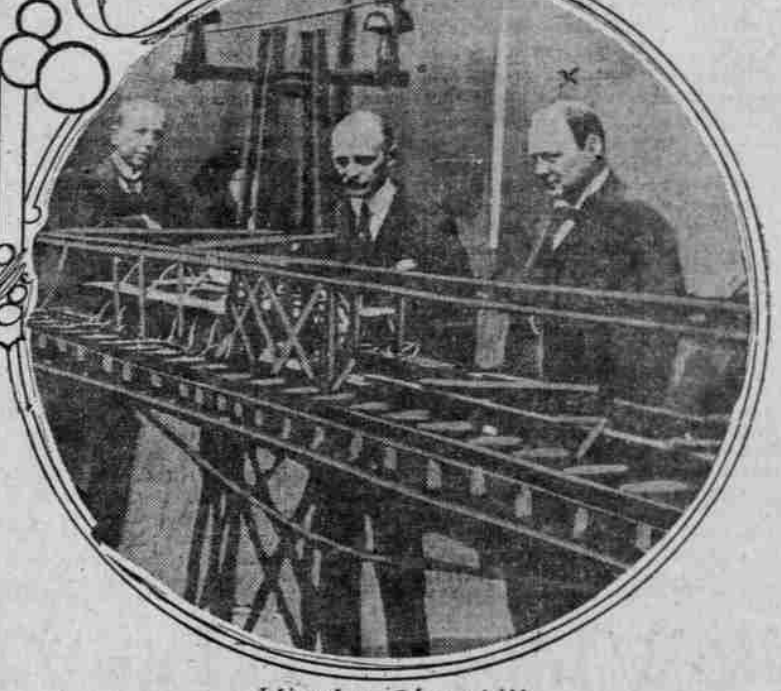
Your business man could take an early train, do a good day's work in the Windy City and get home in time for dinner with his family in New York.

Congressmen from Manhattan would be able to commute over to Washington on a train that would take about three-quarters of an hour to make the trip.

In England the principal difficulty will be keeping the trains from running off the island when they are once started.



Sir Hiram Maxim Trying to Press Down Car Which is Suspended in Air



Winston Churchill, English Secretary of the Navy, Watching a Demonstration.

ater. Down the center of the room is a series of nickel posts about three feet high, surmounted by black steel cylinders eight inches in diameter and five inches deep.

Beyond these are the dials of scales and weighing machines that remind one of a high-class butcher shop. Over beside the switchboard is a set of bells like those used by the Swiss bellringers in a vaudeville act. Of these, more later.

The "wizard" of the revolutionary principle of locomotion has about his personality nothing of the occult, or obscure. About 45 years old, stockily built, with gray hair and moustache, and gray-blue eyes, mild, yet penetrating, he is the type of hundreds of other expatriated Frenchmen to be seen any day in those little cafes in the French quarter of New York City.

As we enter he is testing the strength of the electric current tapped from a local wire and passed through the transforming box, a black square contrivance packed with copper spools and magnets, and alive with sparks. In this secret box the magnetic electric wave is caught and divided and changed into a current of repulsion.

The current is now switched into one of the cylinder surmounted posts in the center of the room. On the top of the spool rests a disk of aluminum, eight inches across and an inch thick. Suddenly, as though moved by some invisible agency, the disk begins to dance on the top of the cylinder. Now it is raised clear and remains suspended in the air. Now it drops back with a metallic clatter as the current is shut off. This test reveals the principle of the levitated train.

Every one is familiar with magnetic attraction. Reverse that principle and you understand the lifting of the aluminum disk. It is what might be called magnetic repulsion. This is a paradox of terms, but it describes the force employed. When the repellant current is turned into the spools, try as you like you cannot press the aluminum plate down upon it. What feels like a cushion of compressed air seems to resist your every effort.

It has been discovered by M. Bachelet

that only certain metals are repelled by his current. Not that the inventor makes claim for having found out a new principle, but of applying an old one. For the fact that a copper ring would float over an alternating current magnet has been known in scientific circles for a number of years. This has proved to be a serious nuisance to electrical manufacturers in all kinds of work.

But the credit of turning this phenomenon to account rests with M. Bachelet. After exhaustive experiments with various metals he found that aluminum as pure as possible was the best for levitating purposes.

Curiously enough, the current has an entirely different effect on steel. This metal is immediately magnetized and consequently attracted by the repulsion wave. To show this the inventor lays a steel disk on the spool, turns on the current and the piece of metal cannot be pried from its base. But place a slip of copper or aluminum between the steel and the spool and the attraction is overcome and the heavier metal is raised in air above the non-magnetized disk.

To show that the current will in no way injure and that any number of volts of it can pass through the body without destroying life a bowl of goldfish covered with a copper lid is used for the next experiment. Placed on the spool, the lid is lifted by the unseen force which permeates the glass of the bowl and the water, where the fish swim about apparently unconscious of their electrified state.

It must not be supposed that when you see these circles of heavy metal floating in the air the attraction of gravity is overcome. M. Bachelet makes no such claim. In fact, he takes pains to demonstrate by another experiment that the weight of an object lifted by the current is always constant. Two weighing machines, already referred to, are used to show this.

In each scale tray a weight of six pounds is placed, which registers on the dial of the separate machines. The scale trays are placed one below the other. The mystic stream is turned

be put into operation at a reasonable cost. In the matter of operating they the cost to carry five pounds weight one hour would be 1 cent. Here is a basis worth figuring on.

It is the present plan of the inventor to construct a full-sized "flying train" on a track laid out at some place convenient to London. His first line will be for express and mail only. Already he has designed a car suitable for the latter service.

Meanwhile the dusty warehouse down in the Italian quarter of London is the mecca of the great men of the city. Engineers, electricians, scientists, armers, financiers, all troop to the demonstrating room to see the wonderful model in operation. They come in a constant stream down the dingy street and climb the narrow stairway to the magic parlor. They all examine it closely, but with typical reserve they venture no opinion.

It is only when an expert like Sir Hiram Maxim enters the curtained experiment room that one hears phrases of enthusiastic praise. This venerable disciple of science came in a skeptical mood, but as the mystery of the plan was unfolded to him his vivid imagination saw in its completed perfection the application of this revolutionary principle of conveyance. He danced about the model like a delighted child. And he had nothing but sincerest congratulation to offer.

Winston Churchill, who holds in the English Cabinet the position corresponding to Secretary of the Navy, was another distinguished visitor. Beyond doubt he was deeply interested, but he refused to venture an opinion as to the practicability of the car.

Also from the Admiralty came Sir Henry Jackson, K. C. B., chief of the war staff. He is the great English expert on electricity and a recognized authority on its uses. In company

with other officers, he spent an hour and a half examining every feature of the model.

And so it happens that this new marvel of transportation finds its first appreciation in Europe. Already the question of time saved in transatlantic mails is under consideration. With this new system installed the last post for New York from London would cross 45 minutes before the steamer sails, not the day previous, as is the case now. This would be an immense saving to business men.

Again, looking at the proposition from a strictly European point of view, a mail from Paris to St. Petersburg that takes only ten hours would be a tremendous step forward for commerce. All that has been written about the time saved in mail service applies equally to the forwarding of express.

Passenger transportation will be the last perfection of the levitated system. It will be carried out before the inventor wishes to take the risk of sending human freight through the air at lightning speed.

This new railroad could be erected along the right of way of existing railroads. While it is a radical change from present systems, yet it is not so extreme an alteration as actual flying.

It is idle to prophesy. Every inventor expects discouragements. He knows beforehand that, despite boasted craving for the new, nothing takes hold with people as a whole as slowly as an original idea that is revolutionary in principle. And it was a disappointment of this kind that drove this grizzled, mystic-eyed, expatriated Frenchman from America, the land of his adoption, to England's shores. In that country he has found appreciation instead of neglect. There he has met a genius who has discovered a fundamental idea which will be of enormous service to mankind.

## WOMAN WHO TELLS FIBS

(CONTINUED FROM PAGE 3.)

ment his plan of transportation can freedom only comes when we know the truth, as the Bible says, and it sets us free.

Jailed by Lies.

A lie is an awful jailer. Pity the woman who is in the clutches of a lie! Some philosopher has said that to cover up one lie a person has to summon 20 others to assist at the burial. And each of these, in turn, becomes a menace.

Lies are like chickens, they come home to roost. The old proverb has a lot of homely truth in its warning. We can't tell a lie and have it end there. It is a boomerang that may take many days to strike back where it started, but it will do so at last.

"Is there a way to stop lying?" asks a woman who has the habit. There is, of course. It is not an easy thing to do, but once a woman has realized the awful results that come from telling untruths she is eager to clutch at the wisdom that Becky in the play voices when she says: "Tell the truth about everything. It's the only way. I will never again tell a lie, no matter how tiny."

Truth is so beautiful and a lie so sinister that it is curious that anyone should be deceived. The easiest way to get out of trouble is to tell the truth. Isn't it Thoreau who asks the simple question that would solve all things if we could but see it that way? "Let the beautiful laws prevail. Let us not weary ourselves by resisting them. When we rest our bodies we cease to support them; we recline on the lap of the earth." So when we would rest our spirits we must recline on the Great Spirit.

If we only could put down our "load of falsehoods!" If we only could see that truth is so mighty she must prevail sooner or later and that in making her our ally instead of our essence lies our only chance of happiness.

Portrait of a Self-Made Man.

A pathologist of standing inveighs against the "self-made man" in terms that will be surprising to many. "The self-made man," he says, "is often in the process of degeneration, and the first evidence of degeneracy is a family in the selfishness and meanness of the cunning, avarice and moral guile, by which the self-made man succeeds in amassing a fortune for his still more degenerate children to spend in gratifying their selfish desires." There is another side to the matter, and Thoreau saw it when he said that the man who had acquired wealth would insist on having his sons educated, and thus he would become the real founder of a family.—Springfield (Mass.) Republican.