



FROM THE FRENCH OF JULES VERNE.

“**T**AKE care!” cried my conductor, “there’s a step!”

Safely descending the step thus indicated to me, I entered a vast room, illuminated by blinding electric reflectors, the sound of our feet alone breaking the solitude and silence of the place.

Where was I? What had I come there to do? Who was my mysterious guide? Questions unanswered. A long walk in the night, iron doors opened and reclosed with a clang, stairs descending, it seemed to me, deep into the earth—that is all I could remember. I had, however, no time for thinking.

“No doubt you are asking yourself who I am?” said my guide: “Colonel Pierce, at your service. Where are you? In America, at Boston—in a station.”

“A station?”

“Yes, the starting-point of the ‘Boston to Liverpool Pneumatic Tubes Company.’”

And, with an explanatory gesture, the Colonel pointed out to me two long iron cylinders, about a mètre and a half in diameter, lying upon the ground a few paces off.

I looked at these two cylinders, ending on the right in a mass of masonry, and closed on the left with heavy metallic caps, from which a cluster of tubes were carried up to the roof; and suddenly I comprehended the purpose of all this.

Had I not, a short time before, read, in an American newspaper, an article describing

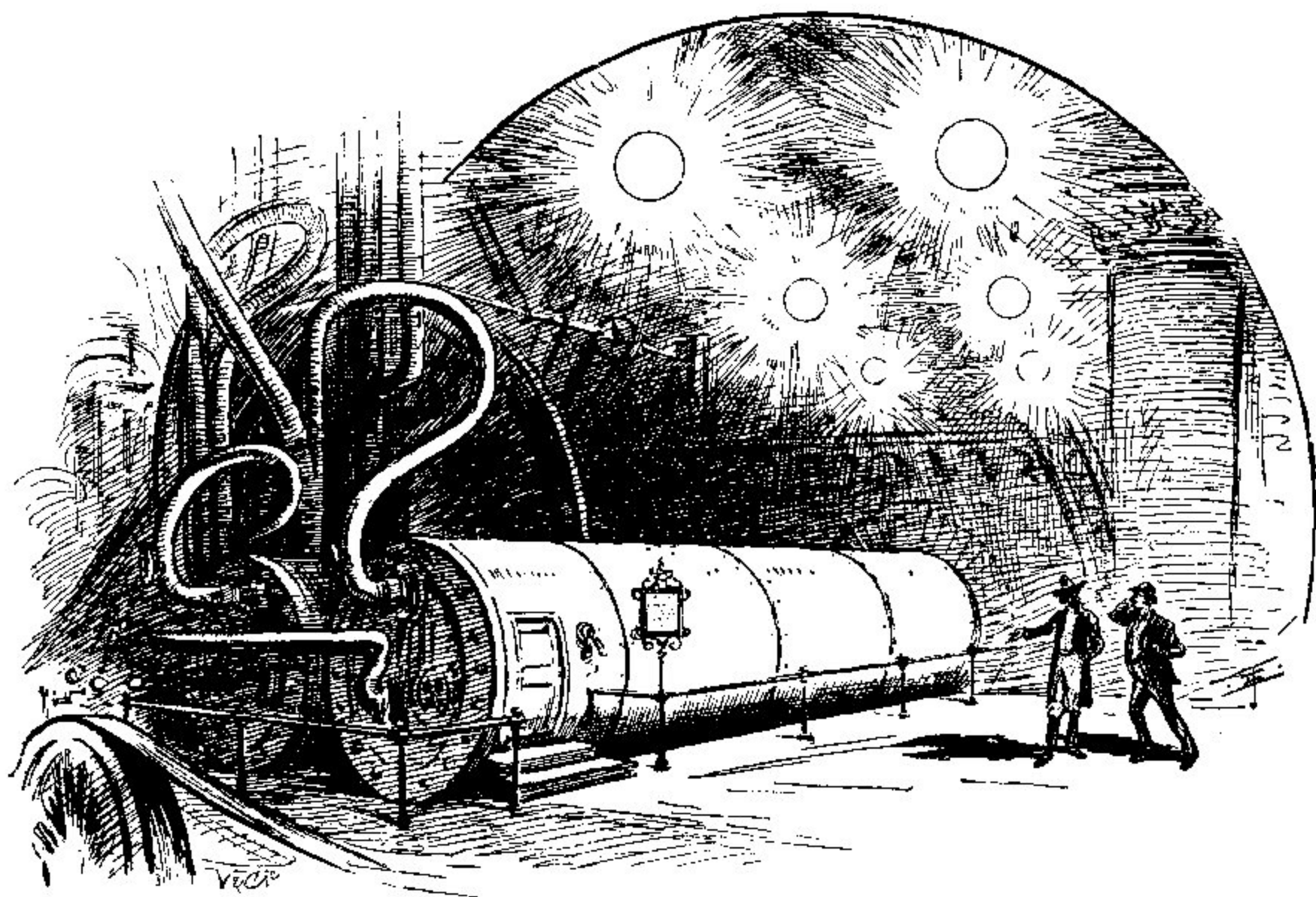
this extraordinary project for linking Europe with the New World by means of two gigantic submarines tubes? An inventor had claimed to have accomplished the task; and that inventor, Colonel Pierce, I had before me.

In thought I realized the newspaper article.

Complaisantly the journalist entered into the details of the enterprise. He stated that more than 3,000 miles of iron tubes, weighing over 13,000,000 tons, were required, with the number of ships necessary, for the transport of this material—200 ships of 2,000 tons, each making thirty-three voyages. He described this Armada of science bearing the steel to two special vessels, on board of which the ends of the tubes were joined to each other, and incased in a triple netting of iron, the whole covered with a resinous preparation to preserve it from the action of the seawater.

Coming at once to the question of working, he filled the tubes—transformed into a sort of pea-shooter of interminable length—with a series of carriages, to be carried with their travellers by powerful currents of air, in the same way that despatches are conveyed pneumatically round Paris.

A parallel with the railways closed the article, and the author enumerated with enthusiasm the advantages of the new and audacious system. According to him, there would be, in passing through these tubes, a suppression of all nervous trepidation, thanks to the interior surface being of finely polished steel; equality of temperature secured



THE PNEUMATIC TUBES.

by means of currents of air, by which the heat could be modified according to the seasons; incredibly low fares, owing to the cheapness of construction and working expenses—forgetting, or waving aside, all considerations of the question of gravitation and of wear and tear.

All that now came back to my mind.

So, then, this "Utopia" had become a reality, and these two cylinders of iron at my feet passed thence under the Atlantic and reached to the coast of England!

In spite of the evidence, I could not bring myself to believe in the thing having been done. That the tubes had been laid I could not doubt; but that men could travel by this route—never!

"Was it not impossible even to obtain a current of air of that length?"—I expressed that opinion aloud.

"Quite easy, on the contrary!" protested Colonel Pierce; "to obtain it, all that is required is a great number of steam fans similar to those used in blast furnaces. The air is driven by them with a force which is practically unlimited, propelling it at the speed of 1,800 kilometres an hour—almost that of a cannon-ball!—so that our carriages with their travellers, in the space of two hours and forty minutes, accomplish the journey between Boston and Liverpool."

"Eighteen hundred kilometres an hour!" I exclaimed.

"Not one less. And what extraordinary consequences arise from such a rate of speed!

The time at Liverpool being four hours and forty minutes in advance of ours, a traveller starting from Boston at nine o'clock in the morning, arrives in England at 3.53 in the afternoon. Isn't that a journey quickly made? In another sense, on the contrary, our trains, in this latitude, gain over the sun more than 900 kilometres an hour, beating that planet hand over hand: quitting Liverpool at noon, for example, the traveller will reach the station where we now are at thirty-four minutes past nine in the morning—that is to say, earlier than he started! Ha! ha! I don't think one can travel quicker than *that*!"

I did not know what to think. Was I talking with a madman?—or must I credit these fabulous theories, in spite of the objections which rose in my mind?

"Very well, so be it!" I said. "I will admit that travellers may take this mad-brained route, and that you can obtain this incredible speed. But, when you have got this speed, how do you check it? When you come to a stop, everything must be shattered to pieces!"

"Not at all," replied the Colonel, shrugging his shoulders. "Between our tubes—one for the out, the other for the home journey—consequently worked by currents going in opposite directions—a communication exists at every joint. When a train is approaching, an electric spark advertises us of the fact; left to itself, the train would continue its course by reason of the speed it had acquired; but, simply by the turning of a handle, we

are able to let in the opposing current of compressed air from the parallel tube, and, little by little, reduce to nothing the final shock or stopping. But what is the use of all these explanations? Would not a trial be a hundred times better?"

And, without waiting for an answer to his questions, the Colonel pulled sharply a bright brass knob projecting from the side of one of the tubes: a panel slid smoothly in its grooves, and in the opening left by its removal

I perceived a row of seats, on each of which two persons might sit comfortably side by side.

"The carriage!" exclaimed the Colonel. "Come in."

I followed him without offering any objection, and the panel immediately slid back into its place.

By the light of an electric lamp in the roof I carefully examined the carriage I was in.

Nothing could be more simple: a long cylinder, comfortably upholstered, along which some fifty arm-chairs, in pairs, were ranged in twenty-five parallel ranks. At either end a valve regulated the atmospheric pressure, that at the farther end allowing breathable air to enter the carriage, that in front allowing for the discharge of any excess beyond a normal pressure.

After spending a few moments on this examination, I became impatient.

"Well," I said, "are we not going to start?"

"Going to start?" cried the Colonel. "We *have* started!"

Started—like that—without the least jerk, was it possible? I listened attentively, trying

to detect a sound of some kind that might have guided me.

If we had really started—if the Colonel had not deceived me in talking of a speed of eighteen hundred kilometres an hour—we must already be far from any land, under the sea; above our heads the huge, foam-crested waves; even at that moment, perhaps—taking it for a monstrous sea-serpent of an unknown kind—whales were battering with their powerful tails our long, iron prison!

But I heard nothing but a dull rumble, produced, no doubt, by the passage of our carriage, and, plunged in boundless astonishment, unable to believe in the reality of all that had happened to me, I sat silently, allowing the time to pass.

At the end of about an hour, a sense of freshness upon my forehead suddenly aroused me from the torpor into which I had sunk by degrees.

I raised my hand to my brow: it was moist.

Moist! Why was that? Had the tube burst

under pressure of the waters—a pressure which could not but be formidable, since it increases at the rate of "an atmosphere" every ten metres of depth? Had the ocean broken in upon us?

Fear seized upon me. Terrified, I tried to call out—and—and I found myself in my garden, generously sprinkled by a driving rain, the big drops of which had awakened me. I had simply fallen asleep while reading the article devoted by an American journalist to the fantastic projects of Colonel Pierce—who, also, I much fear, has only dreamed.



INSIDE THE CAR.