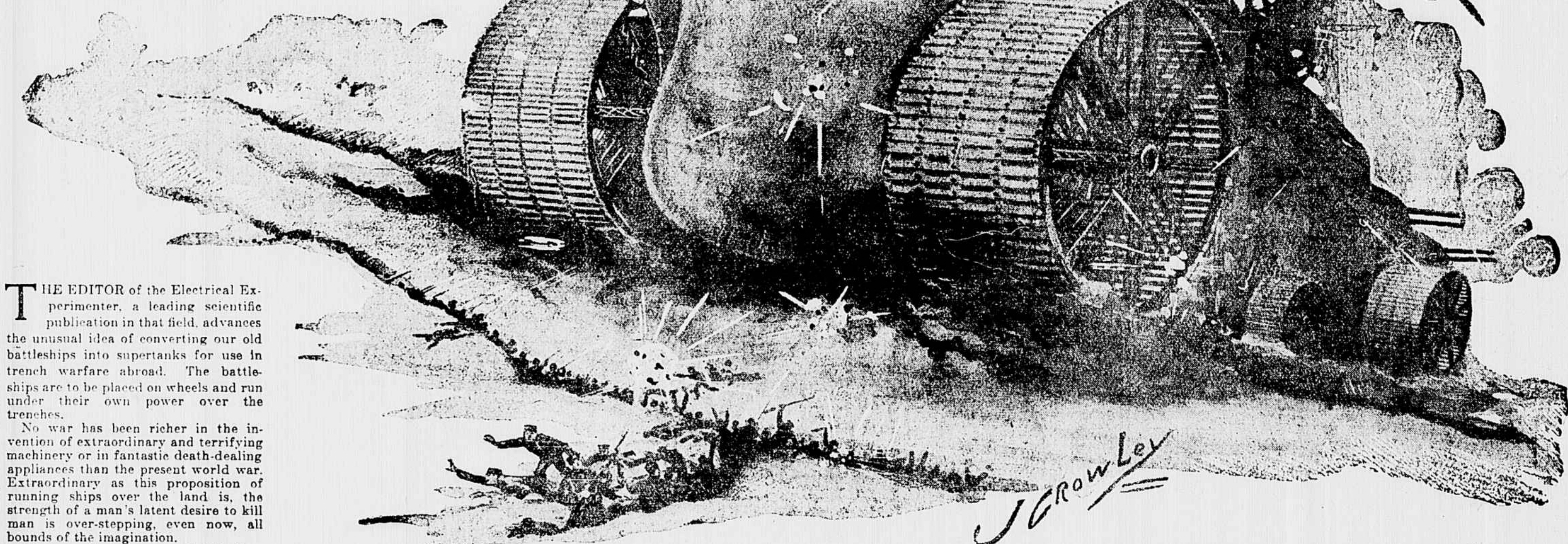
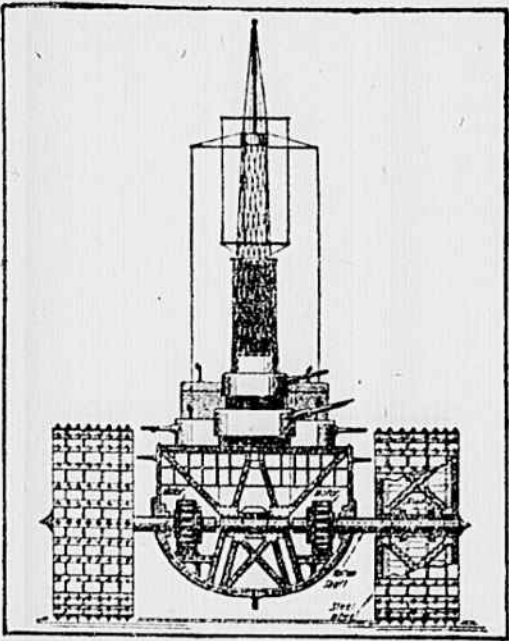


# To Use Our Old Battleships As Super-Tanks ?

The Editor of the Electrical Experimenter Advances a Spectacular and Ingenious Plan to Convert Obsolete Boats of Our Fleet Into Huge Moving Land Forts

*How a Converted Battleship Would Appear "Squatting" on the Trenches and Dealing Death and Destruction for Miles with Its Great Guns and High Explosives.*

*On the Left Is a Cross Section Diagram Showing the Arrangement of the Wheel, Axles and the Braces Inside the Hull of the Converted Ship.*



THE EDITOR of the Electrical Experimenter, a leading scientific publication in that field, advances the unusual idea of converting our old battleships into supertanks for use in trench warfare abroad. The battleships are to be placed on wheels and run under their own power over the trenches.

No war has been richer in the invention of extraordinary and terrifying machinery or in fantastic death-dealing appliances than the present world war. Extraordinary as this proposition of running ships over the land is, the strength of a man's latent desire to kill man is over-stepping, even now, all bounds of the imagination.

At once, of course, several objections to Dr. Gernsback's plan present themselves. First, there is the tremendous weight of the battleship—from 10,000 to 30,000 tons. It is difficult to conceive how any wheels could be constructed which would prevent this mighty mass from crushing down into the earth and becoming as immovable as a fort.

There is, second, the fact that a ship is built for stresses in the water, and not for the gravitational pull on land.

And there is, third, the fact that the battleships are armored only down to a certain part of the hull, and that the unarmored part would be vulnerable as a land boat. These objections Doctor Gernsback answers in his article in the Electrical Experimenter, but whether convincingly or not the reader must decide.

It would seem that our old battleships could be so used, but their effectiveness would not be in pursuit of armies or where any speed at all is concerned. They might take the place, however, with tremendous effectiveness, of the "tanks," as the armored tractors are known abroad. These tractors, while effective, are nevertheless vulnerable to three-inch guns and over. The land battleship could withstand, no doubt, as heavy shells on land as at sea, and, loaded with high explosives and great guns, could crawl out to the trenches, squat upon them and proceed to deal out death and destruction for many square miles.

Doctor Gernsback in his article says:

"I do not claim to be the originator of the idea to run battleships or other ships over land. That idea is old. Twenty-five years ago there was published in a German weekly an idea to run a powerful car, moving over a dozen closely-spaced paralleling tracks, under a ship. This car, after the ship was made fast to it in a suitable manner, was then to be drawn overland—over the present Panama Canal route—by powerful locomotives.

"A battleship weighs anywhere from 10,000 tons upward—quite a respectable weight. How, then, can we run such a monster on land? How can it be propelled?"

"The United States Navy has a number of battleships of the pre-dreadnought type, good

ships as yet, but obsolete as first-line ships. I refer to ships of the Oregon, Iowa, Illinois, Kentucky, Massachusetts, Indiana class. These ships are fully equipped now, have good crews and good guns. But the chances are that ten years from now they will be used as targets or otherwise will be relegated to the scrap-heap. So why not send these ships to the front? Briefly, the idea is this:

"Let us send these ships, men, guns and all to France. In the holds of the vessels we pack channel irons and 'T' as well as 'I' steel beams, cut to the right length before sailing. These pieces are fashioned much after the structural toy steel pieces—you can make almost anything out of them.

"When our battleship arrives in France it is immediately put in drydock, and the crew at once proceeds to make the wheels from the channel steel. These huge wheels, measuring over fifty to sixty feet in height, are made on the plan of a Ferris wheel, light but strong. Of course, to sustain a weight of 10,000 tons or more, a set of single wheels won't do. Rather each wheel is fashioned of a number of wheels, from five upward, paralleling each other, as shown by the accompanying illustration. These separate wheels are bolted or riveted together by means of steel 'I' beams running over the circumference of the separate wheels. The latter are strengthened by additional cross-truss work, as seen in the illustration. Thus a very light, as well as powerful wide wheel, is formed. With a little previous drilling the crew should be able to construct the necessary six wheels in less than one week—yes, it can be done, providing the pieces are cut to the right dimensions at home.

"Next the 13-inch hollow steel shaft is considered. This, of course, has been brought from America, too. The hollow shaft is advised, first, because it weighs less, and second, because such shafts are equally as strong as solid ones, within a reasonable proportion.

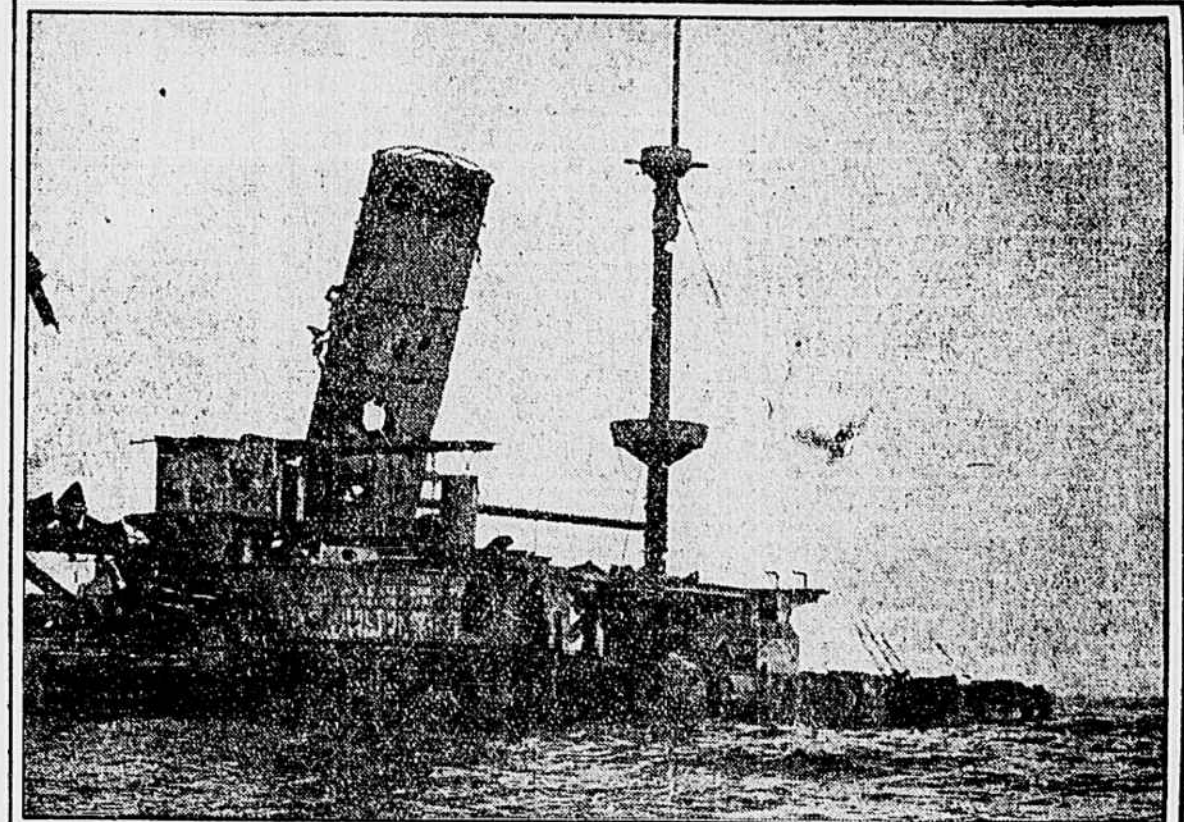
"The two wheels at the stern are 'idlers,' the same as the front wheels on an automobile. No power is applied to them; they simply rotate on the shaft, extending from one wheel to the other, clear through the ship.

The two small centre wheels are also idlers. They serve to take up undue shocks, which might break the ship in two, when negotiating difficult terrain.

"The two front (bow) wheels are the 'drivers.' They are bolted solid to the shafts, two of the latter being used, as will become apparent at once. Our illustration shows that the two shafts revolve in a common bearing (which might be an old reconstructed gunbarrel). Each shaft in turn is directly coupled to a slow-running electric motor armature, as clearly shown. And this, by the way, is the much discussed electrical drive, adopted in our latest monster battle cruisers now being constructed. From this it becomes apparent how the land battleship is propelled overland in a simple and practical manner. The steering is equally simple and efficient. By running one motor at a slightly higher or lower speed the ship must either turn to the right or to the left, as desired by its commander.

"A huge wheel, such as the ones here described, will easily ride over the widest trenches. Ordinary shell holes will be negotiated as easily as a cartwheel runs over a hole in the street due to a missing cobblestone. Rivers will be forded easily, if there is a fair approach. Even steep banks will be negotiated by running the craft diagonally through the stream. Low hills will prove no obstacle at all, while steeper ones can be climbed by running the ship in a zig-zag line.

"It goes without saying that in order to carry the enormous strain the ship must be strengthened by a good deal of cross-truss steel work, as indicated in our illustration. Otherwise the shaft would rip clear through the decks. The reader has already guessed that no new power plant is required. The old one is of course utilized, the ship burning coal the same as if it were on the ocean. "After finding the range of the enemy guns, the ten-inch guns of the 'Oregon on wheels' can either silence them or crush the German battery by simply running over it. There is no escape for them, for we have the advantage of quick mobility (the



The Old Battleship Texas After Having been Used as a Target by Our Fleet—the Type of Boat Which, It Is Suggested Would Be of Enormous Value on Land.

ship runs from fifteen to eighteen miles per hour) against the slow mobility of the enemy guns, which cannot be moved quickly.

"After annihilating these, the land monster runs amuck, destroying ammunition dumps, and raising general havoc behind the lines. Small guns and machine guns prove of little use against our armored battleships, and even if, as is to be expected, enemy shells find their mark, they cannot 'sink' us or stop us. For the engines as well as all other vital parts are protected by heavy armor. The wheels themselves will not be put out of running order easily, because they are not solid. The shells, even if they do hit, will hardly destroy the

entire wheel. Beyond ripping out a few steel beams, no great damage will be done.

"If several battleships are simultaneously in a grand attack, there is no question that the enemy must fall back over a wide area.

"And it will be impossible for the enemy to board the swiftly moving vessel. Even if forced to stand still, its machine guns and other guns would ward off all close attacks.

"There remains the aeroplanes dropping bombs into the ship. The answer here would be—anti-aeroplane guns, installed already now on every modern ship. Besides, our own aeroplanes would protect the ship by beating off the enemy flyers."