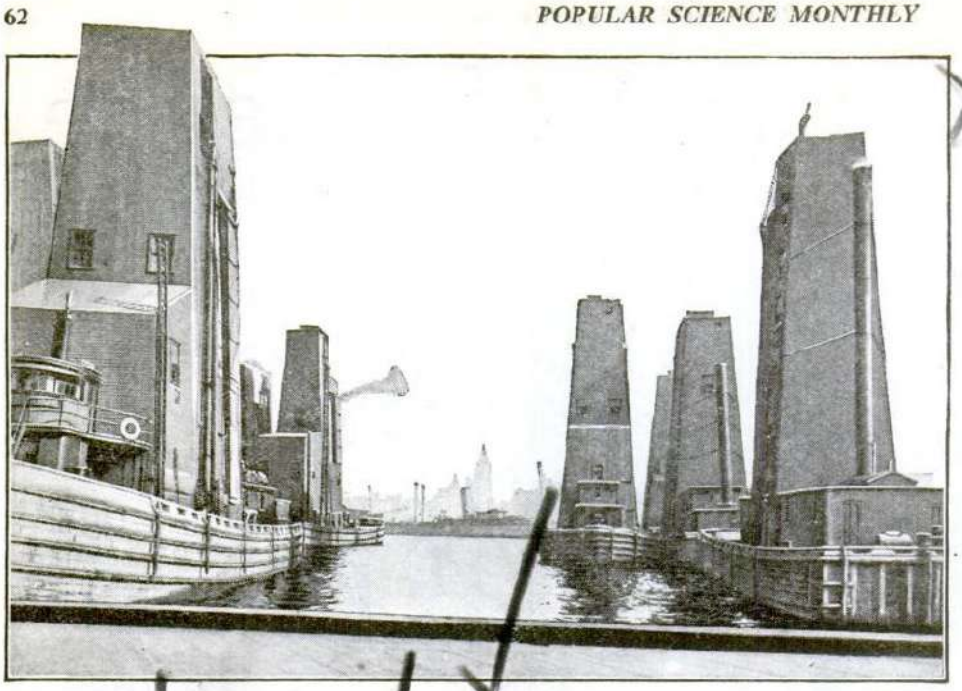


© U. & U.

Huge Floating Elevators Load Grain Ships

THESE floating elevators in the Hudson River at Jersey City, N. J., represent the most modern method of transferring grain at tidewater terminals. They are said to effect enormous economies over the old methods.

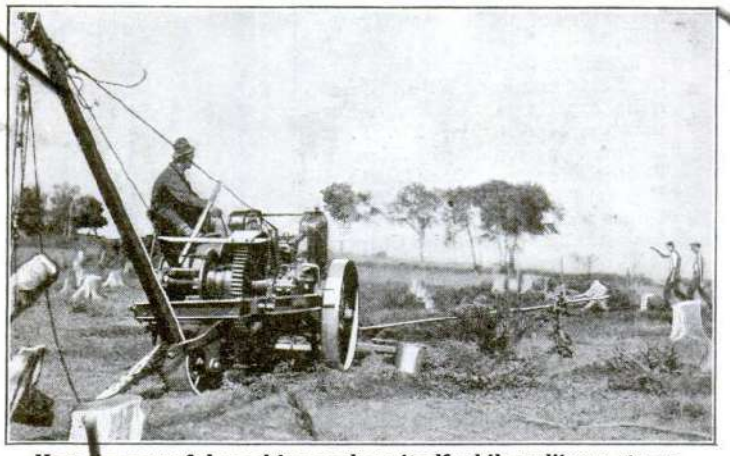
From the towering elevators the grain is loaded into ships by gravity.

Mechanical Stump Puller Anchors Itself

A STUMP puller that carries an anchor and an extra weight, and therefore need not be anchored to tree or stump, is a new invention for reclamation of waste lands.

The machine has three wheels and practically all its weight is so located as to counterbalance the pull of the cable. A heavy axle passes through the two rear wheels and supports the frame, into the rear end of which is built the anchor. Pivoting the frame over this axle forces the anchor blade to plow into the ground while the machine is pulling at the stump.

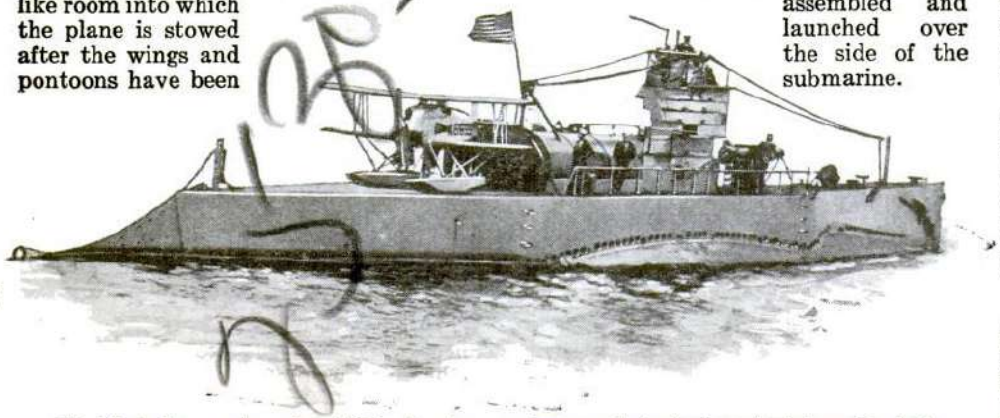
Additional anchoring weight is hung from a boom held by guy wires from the frame.



How the powerful machine anchors itself while pulling a stump

Seaplane Carried on Deck of Submarine

ON THE deck of the United States submarine MS-1 are housing facilities for a seaplane. The hangar is a tank-like room into which the plane is stowed after the wings and pontoons have been demounted from the fuselage. Within a very few minutes after the submarine has reached the surface, the plane can be reassembled and launched over the side of the submarine.

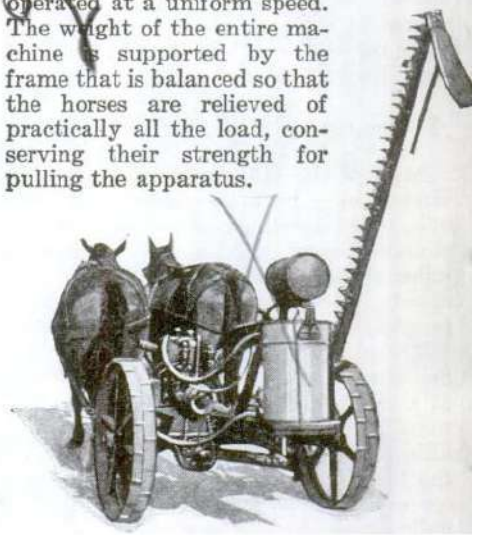


The U. S. Navy submarine MS-1, showing seaplane ready to be launched from its deck

Motor Drives Blades of Horse-Drawn Mower

A MOTORIZED mowing machine, invented by Robert C. Chattin of Mountainhome, Ida., is drawn by horses, while the mowing blades are driven by power. Power is furnished by an internal combustion engine operatively connected with the cutting blades.

This machine is said to perform the work of two horse-driven sickle or mowing machines and in a more satisfactory manner. The cutter mechanism is operated at a uniform speed. The weight of the entire machine is supported by the frame that is balanced so that the horses are relieved of practically all the load, conserving their strength for pulling the apparatus.



The mower with power plant

New Vise Grips Irregular Object like a Hand

A VISE that grips irregularly shaped objects with the adaptability of a human hand is an important recent mechanical development.

The vise jaws, individual pivoting semicircular segments, are said to adapt themselves to the contour of an irregular object without packing, holding it absolutely rigid. This even distribution of gripping pressure is designed to eliminate the danger of distortion when holding thin-walled objects, as automobile cylinders, or long and narrow work. The vise is tightened by pressure exerted on the vise handle.

The jaws gripping an irregular piece

Another important feature is that the jaws, once fitted to a shape, can be tightened with screws to maintain the same relative positions. Thus, in machining a quantity of objects of the same shape and size, the vise will serve as a special fixture, holding each piece in the same position as every other piece.

A LUNAR rainbow in the form of a complete arc was observed recently during a shower at Sanderstead, Surrey, England. The moon was shining in a portion of the sky that was for the moment cloudless.