

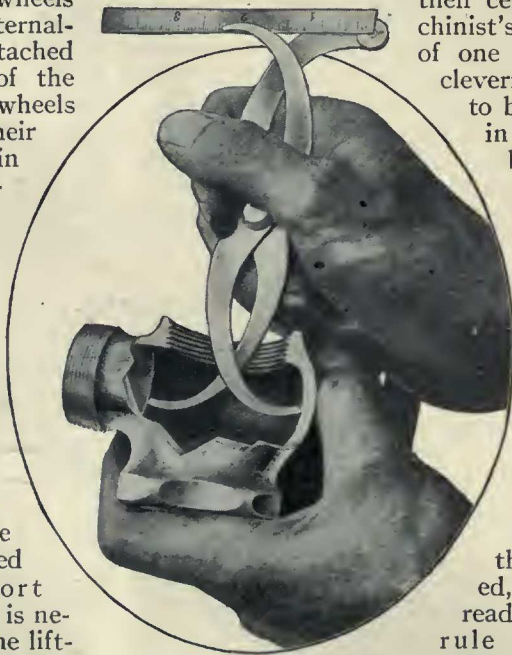
The entire front axle, wheels, driver's seat, battery box, and steering wheel are turned when this cotton truck rounds a corner

Low-Bed Cotton Truck Steered by Huge Bull Wheel

THE motor truck for handling bales of cotton, shown in the accompanying illustration, is not steered by the turning of the front wheels on their spindles. Instead the entire front axle, wheels, driver's seat, battery box and steering-wheel mechanism is revolved in relation to the center line of the truck.

This is accomplished by placing the entire front assembly, wheels and all, within a huge internal-gear bull wheel attached to the side frames of the truck. The front wheels simply revolve on their axle but do not turn in relation to it, the steering of the truck being done by turning the front assembly within the bull wheel by means of a gear in mesh with the teeth of the former.

Thanks to this construction a truck can be utilized with a frame only two inches from the ground, yet it can be steered easily and turned in a remarkably short radius. A low frame is necessary to facilitate the lifting of heavy bales. A truck of this kind can carry an exceptionally heavy load.



This double-caliper can quickly make measurements where another would be worthless

Rubber Instead of Glass Eyes for Wounded Soldiers

ARTIFICIAL eyes of rubber are taking the place of the old-style glass optic for wounded soldiers in Europe. The rubber eyes have the advantage of being unbreakable, and as they are of pneumatic construction they maintain an elastic contact between the eyelids and the back of the orbitary cavity.

To make the new rubber product, a cast formed of liquid plaster is made of the orbitary cavity and from this is constructed an eyeball, the face being of vulcanite. The front and back parts are made of soft rubber, there being a space between the two parts which is occupied by air, making the eyes pneumatic.

A Caliper That Makes Extraordinary Measurements

ATHREE-PIECE caliper which looks like an ordinary caliper bent back upon itself is the invention of a Chicagoan, Mr. Franklin J. Wolff. It consists of two S-shaped pieces of steel pivoted together at their centers, and a small machinist's rule pivoted to the end of one of these pieces. The cleverness of the caliper is to be found in the manner in which it can measure both inside and outside diameters which are so obstructed that an ordinary caliper would be worthless for the purpose. For instance, an ordinary caliper could never measure the internal diameter of the steam-valve body shown in the illustration; but the new duplex caliper does this very readily. When the caliper is fully opened, it is only necessary to read the mark upon the rule opposite which the pointed end of one of the S-pieces stops, and the measurement is obtained.