

A small Lucas sounding-machine was presented to the Lake Survey by the Telegraph Construction and Maintenance Company, and, although rather heavy for constant transport, was used with great

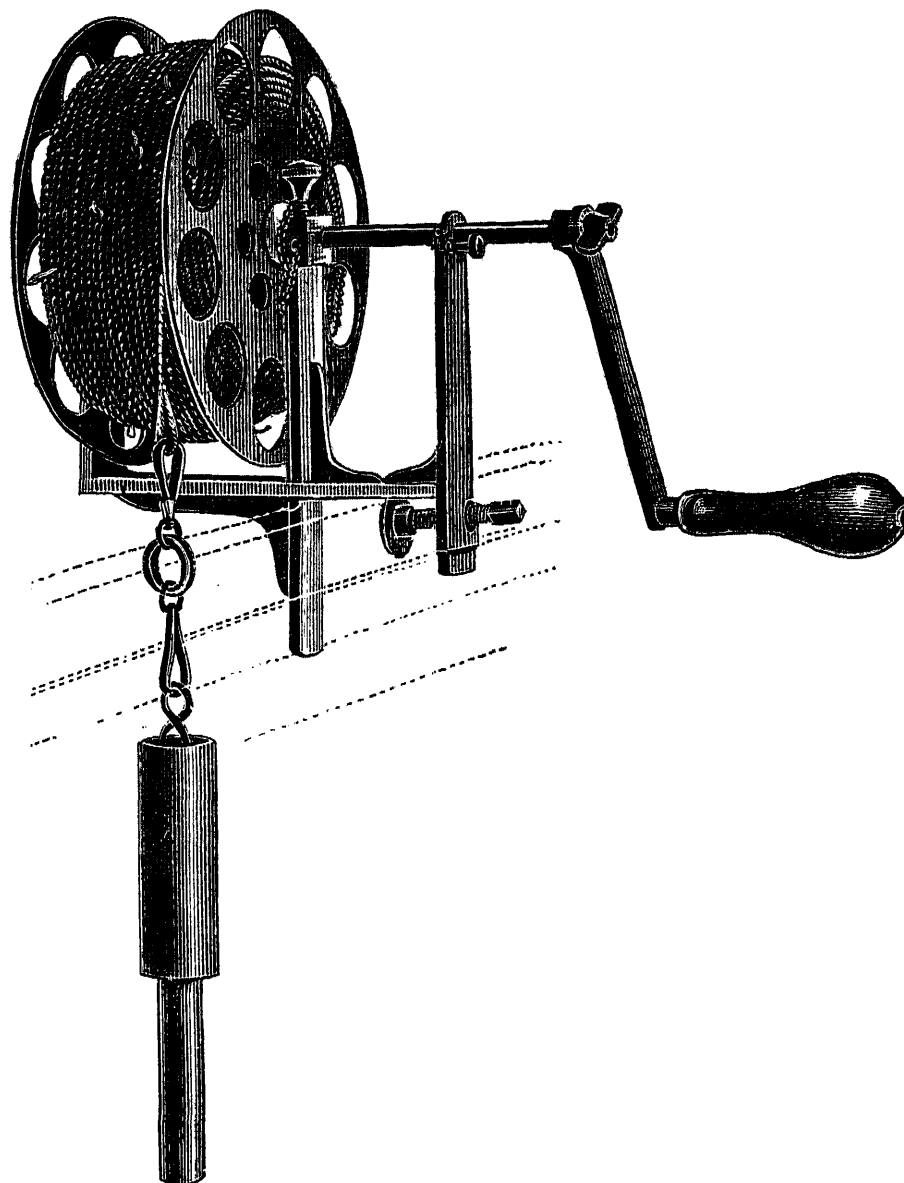


FIG. 6.—Small Sounding-Machine for use in small and shallow lochs.

success in the larger lochs for sounding and taking temperatures in deep water. This machine and one of the Pullar sounding-machines

complete turn round a measuring pulley (G), then through a grease-box (M), and over a guide pulley (H) to the weight (I), which takes the form of a sounding-tube constructed to procure a sample of the deposit, with flap-valve (J) at the foot, the wire being attached to the weight by means of a splice and clip-hook. The measuring pulley has a circumference of nearly one foot (measured through the centre of the wire it is exactly one foot), so that for every foot of wire which runs out the measuring pulley makes one revolution. The motion of the measuring pulley is transmitted to a series of indicating dials (1, 2, and 3), one recording feet, another tens, and a third hundreds of feet. When the weight strikes the bottom the motion ceases, and the depth may be read off the indicating dials. The dials fitted to the present machine read only to a depth of 999 feet 6 inches, but by the addition of an extra dial greater depths could be sounded.