

ness, but I will say this for the 'Fitzgerald' sounding apparatus that I never knew it fail; and we were obliged, unfortunately for ourselves, to try it frequently in very bad weather and under most unfavourable circumstances. The sounding-line ends in a loop passing through an eye in the centre of a bar of iron *F*. The bar terminates at one end in a claw and at the other in a second eye, to which a chain is attached. A scoop *A*, with a sharp, spade-like lip, is fixed to a long and rather heavy iron rod *D*, with an expanded rudder-shaped end to steady it in passing quickly through the water, and beneath this an eye, which fits the claw of the bar *F*. A door *B* fits the scoop to which it is hinged, and it is also hinged to the arm *C*, which, when held in a vertical position, keeps it open. The arm *C* is attached by the chain to the eye in the bar *F*, and the arm and chain correspond in length to the rod *D*. Two teeth *E E* project from *D*, and on these are hung a heavy weight. The

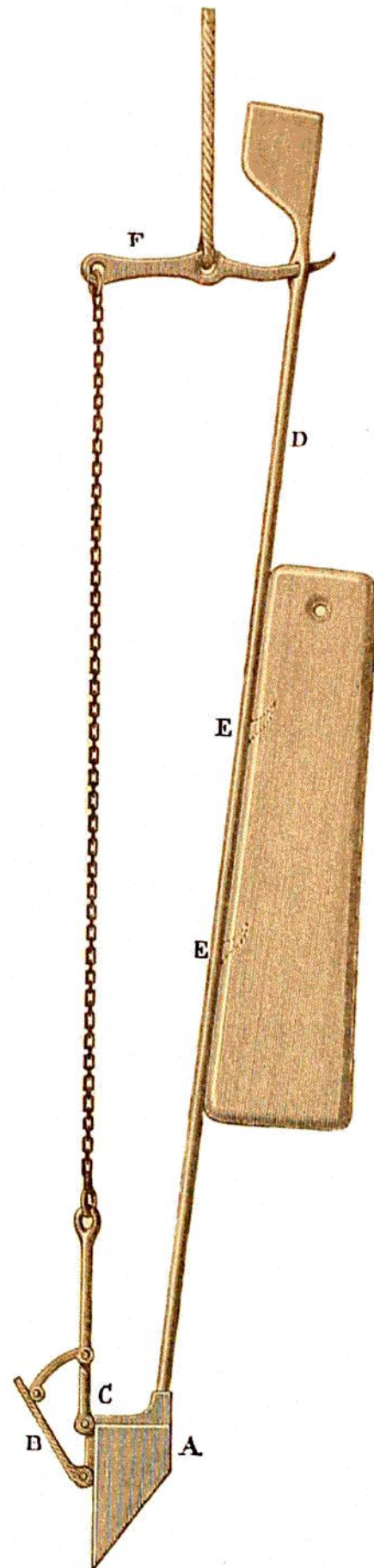


FIG. 41.—The 'Fitzgerald' Sounding Machine.