ledge of the motions of the sea, for which purpose direct current-measurements are necessary.

Measuring the currents at different depths in the sea is much more difficult than might appear at first sight, and re-

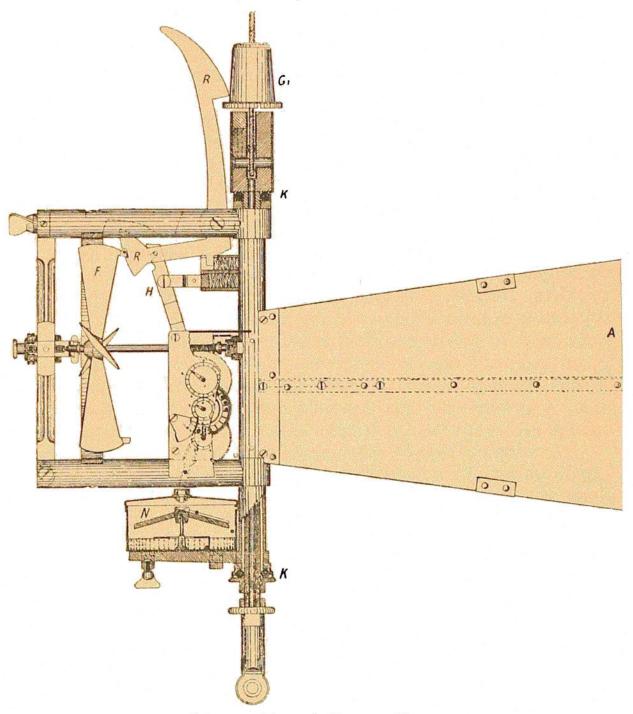


FIG. 177.—EKMAN'S CURRENT-METER.

quires good apparatus. Many excellent current-meters have been constructed, the one made use of during the cruises of the "Michael Sars" being that invented by V. W. Ekman, Ekman's represented in Fig. 177. The apparatus consists of a double current-meter. wing (A), that points in the direction of the current. In front