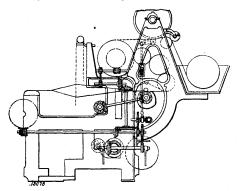
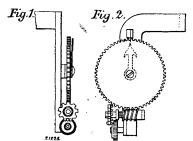
## TEXTILE MACHINERY.

13,078. C. Dratz, Brussels, Belgium. Looms. [1 Fig.] June 23, 1899.—This loom is arranged to colour print the warp while weaving. The warp beam is immersed in a mordanting tank, and the threads are printed by a colour roller and afterwards dried by a steam cylinder. In order to prevent such motion of the warp



threads as would be likely to cause want of sharpness in the outline of the pattern of the finished fabric, the warp is fed continuously by a screw worm motion, and an arrangement is provided by means of which the tension on the thread is equalised during the movement of the shed. (Accepted September 26, 1900.)

21,228. S. Jensen, Providence, R.I., U.S.A. Cloth Measuring. [5 Figs.] October 24, 1899.—This invention relates to cloth measuring apparatus, but more especially to that



part of the same which indicates the length of material which has passed, and is designed principally for use in connection with looms. The machines comprise rollers between which the cloth

passes, and the apparatus, according to this invention, is designed to indicate the number of revolutions of one of such rollers, a certain number of revolutions indicating any particular measurement, such as yards or fractions thereof. The measuring roller is longitudinally extended, or in existing machines, an extension is applied to its end, or mounted to run in contact therewith, a rubber or like band being secured on its outer circumference. A bracket extends over the extension and carries a horizontal shaft upon which is a star-wheel, the points of which come into contact with a rib on the roller extension as it revolves. The shaft also carries a worm which engages a tooth-wheel situated behind a dial and carried by a pintle to which a pointer is secured to indicate the measurements on the dial. (Accepted September 28 1900.)