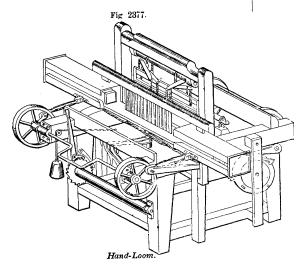
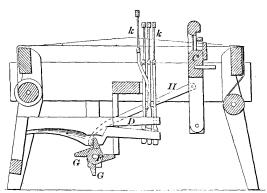
Hand-loom. A form of loom in which the motions are derived from hand power, either by a crank or by pushing the lathe or batten. In the example, the driving shaft, at the front end of the machine, is provided at its middle with a crank, so as to enable the weaver to use both hands when required,



and also to reach any broken thread in the warp. A feed pawl attached to a fly-wheel on the driving feed pawl attached to a fly-wheel on the driving shaft operates a ratchet-wheel on a rearward shaft, provided with tappets which depress in succession the treadles. The picker staff projects from a shaft journaled vertically to the batten, and on this shaft is a strap, the ends of which are divided and secured to the alternate treadles. Thus the harness, let-off, take-up, and sl uttle motions are all derived from the crank which is by the breast of the weaver.

Fig. 2378 is an example of the other kind, in





Hand-Loom.

which the motions are all derived from the batten C, in which is the shuttle-race. The harness levers D are actuated by means of a hooked arm H engaging cams G G on a shaft F. The upright rods k k carrying the harness are interchangeable on the treadles, in order to vary the twill or style of the cloth. See Loom, p. 1354.