C. T. COLBY.

FULLING-MILL.

No. 187,820. Patented Feb. 27, 1877.

Fig. 1.

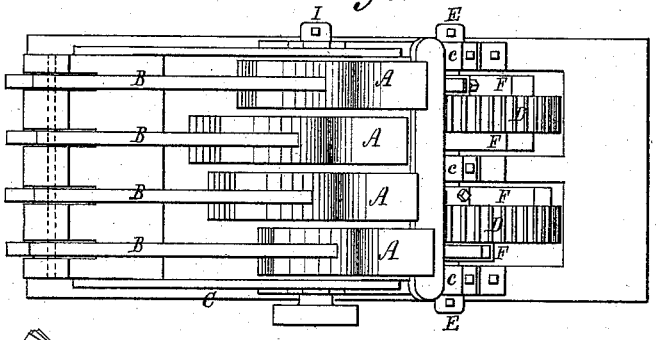


Fig. 2.

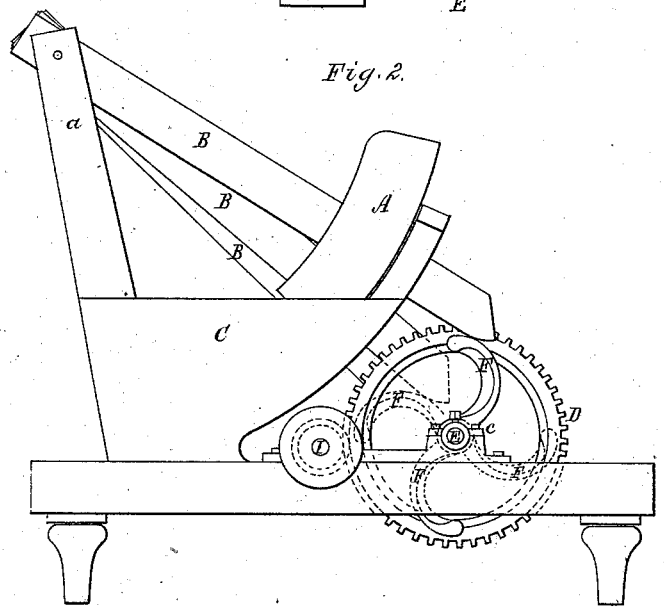


Fig. 3.

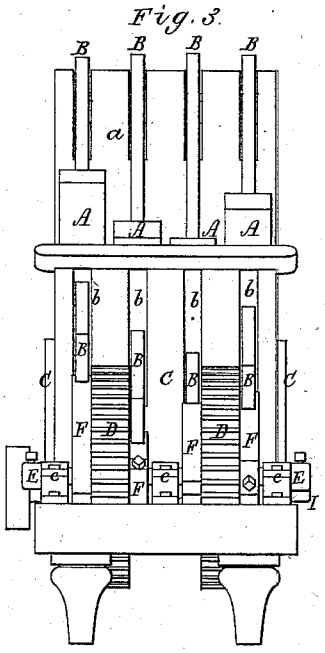
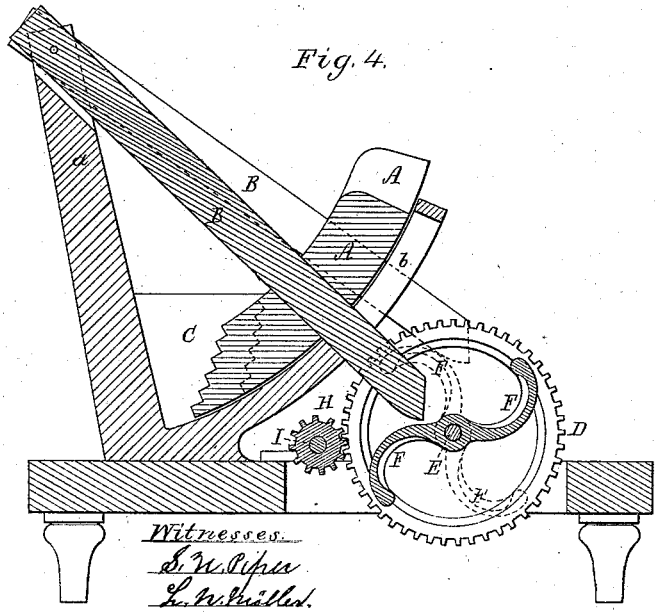


Fig. 4.



Witnesses.
S. W. Pierce
L. W. Miller.

Charles T. Colby.
by his attorney.
R. H. Eddy.

UNITED STATES PATENT OFFICE.

CHARLES T. COLBY, OF NEWBURYPORT, ASSIGNOR TO HIMSELF AND ROBERT B. HAWLEY, OF AMESBURY, MASSACHUSETTS.

IMPROVEMENT IN FULLING-MILLS.

Specification forming part of Letters Patent No. **187,820**, dated February 27, 1877; application filed January 12, 1877.

To all whom it may concern:

Be it known that I, CHARLES T. COLBY, of Newburyport, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Fulling-Mills; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 an end view, and Fig. 4 a longitudinal section, of a fulling mill or machine with my improvement; which consists in the stock-tappets applied to opposite sides of, and rigidly fixed to or formed in one piece with, their driving-gear, and the latter provided with a driving-gear, and arranged on a supporting-shaft and between the stock-arm, all being substantially as and to operate as specified.

Heretofore it has been customary to fix the series of stock-tappets to one driving-shaft, provided with a driving-gear separate from such tappets, and keyed to the shaft. In consequence thereof each tappet, being unsupported except at the shaft, is very liable to break loose or get out of the place on the shaft.

In carrying out my invention neither tappet is keyed or fixed to its supporting-shaft, which simply extends through the hub of the tappet and that of the driving-gear, which has the tappets arranged in and fixed to opposite sides of it, they being founded in one piece with it, and such gear being extended between the arms of a pair of stocks.

In the drawings, A A A A are a series of stocks, supported on arms B B B B, and arranged in a tub or vessel, C, all being as in most fulling-mills. The arms are pivoted to a standard, *a*, and extend, as represented, through slots *b b b b* in the bed of the tub. Between the arms of each pair there is arranged a gear, D, which is supported on a shaft, E, that goes through the hub of the gear, and is sustained in boxes *c c c*. This gear has projecting from its opposite sides the tappets F, for working the pair of stock-arms. These tappets are to be cast or founded in one piece with their gear, so that they are fastened to it, instead of being separate from it and fixed to the shaft. The shaft is to be secured to the gear-wheel, so as to revolve with it; but it does not revolve the tappets, as they are revolved by the gear alone, which engages with and is turned by a pinion, H, fixed on another or driving shaft, I, arranged as represented. Each tappet, by being fixed to and projected from the gear, or cast in one piece with it, cannot work loose therefrom, or get out of place, and will be operated directly by it.

I claim—

In the fulling-mill, the stock-tappets applied to opposite sides of, and fixed rigidly to or cast in one piece with, their gear, in combination with the latter, provided with a driving-gear, and arranged on a supporting-shaft, and extended between the stock-arms, all being substantially as set forth, and to operate as specified.

CHARLES T. COLBY.

Witnesses:
R. H. EDDY,
J. R. SNOW.