(No Model.)

J. W. MILLET.

FULLING MACHINE.

No. 586,052. Patented July 6, 1897.

Fig. 1.

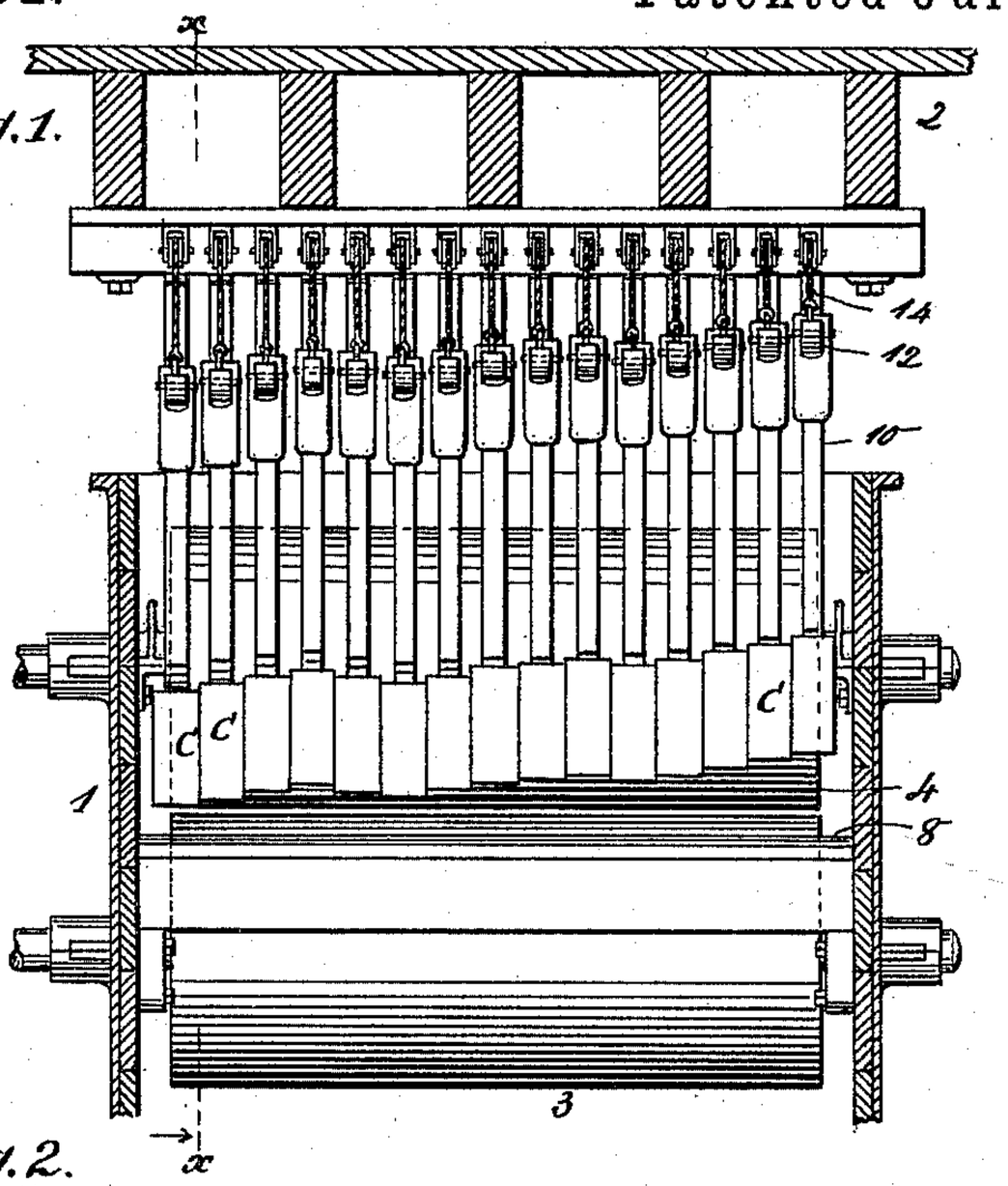
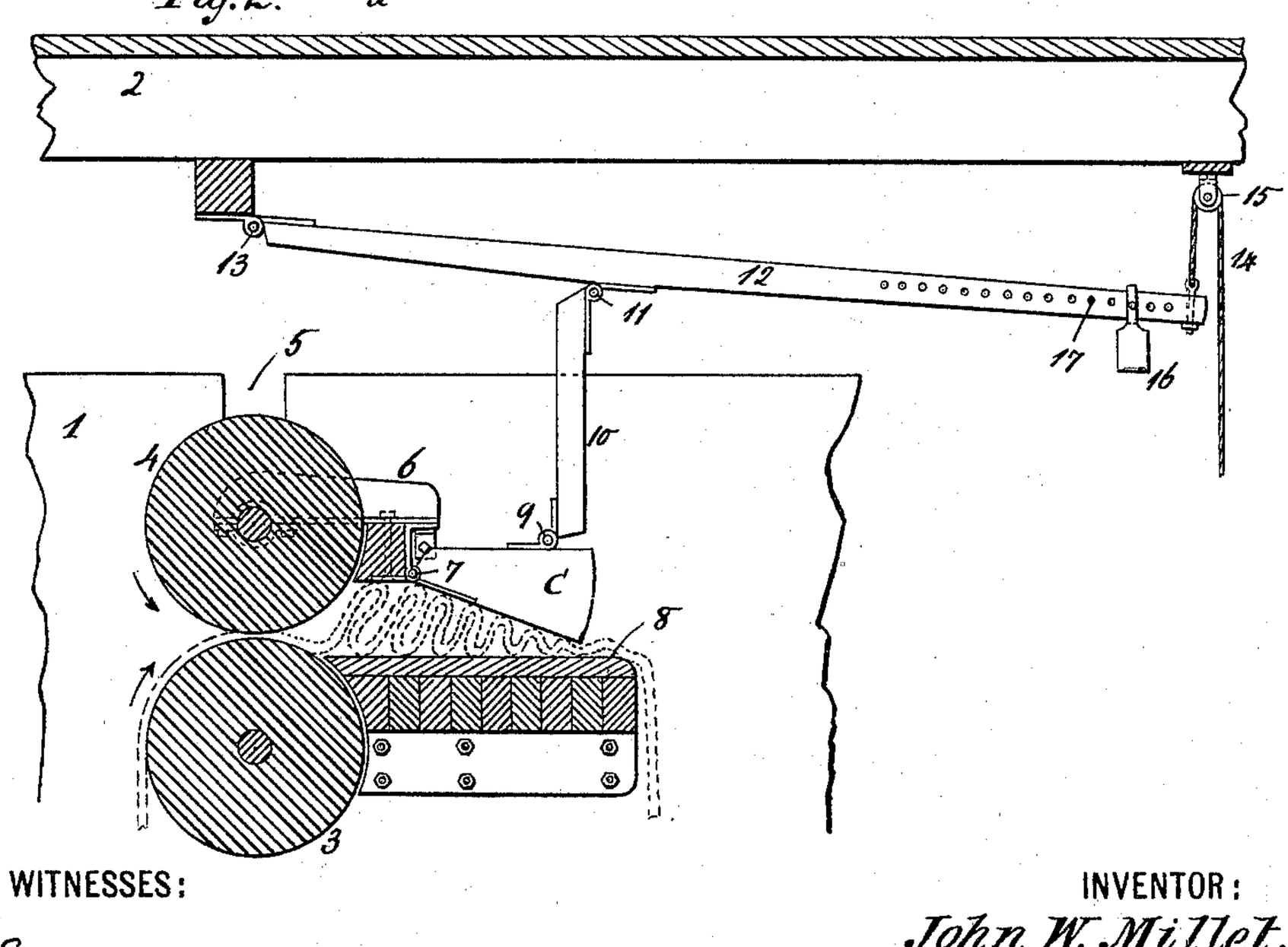


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN W. MILLET, OF DOLGEVILLE, NEW YORK, ASSIGNOR TO ALFRED DOLGE & SON, OF NEW YORK, N. Y.

FULLING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 586,052, dated July 6, 1897.

Application filed November 28, 1896. Serial No. 613,786. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. MILLET, a citizen of the United States, residing at Dolgeville, in the county of Herkimer and State of New York, have invented new and useful Improvements in Fulling-Machines, of which the following is a specification.

This invention relates to a fulling-machine capable of doing exact work or of being adjusted as required; and the invention resides in the novel features of construction set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a sectional front elevation of a fulling-machine. Fig. 2 is a section along *x x*, Fig. 1.

A frame or support is shown at 1 and 2. Rollers 3 and 4 are journaled in the frame, and one of the rollers, as 4, is movable toward and from the other roller, as by a slotted bearing 5 in the frame. These rollers serve to feed the material or felt.

The movable roller 4 has secured thereto or to its journal a support or arms 6, to which at 7 is fulcrumed a beater or apron comprising a series of independent sections C. Fifteen apron-sections are shown in the drawings, but of course this number can be varied. The material fed by rollers 3 and 4 is beaten or worked between the apron C and the table 8. As the roller 4 moves from or toward roller 3, as the passing material varies in thickness, the fulcrum-support 6, with apron C, will accompany such motion of roller 4.

The apron has each section jointed, as at 9, to a link 10, jointed, as at 11, to a lever 12. One such lever is thus linked to each apron-section. The levers 12 may be considered as of the second class, having the resistance-point at 11, the fulcrum at 13, and the power applied, as by a cord or chain 14, led over pulley 15. Each lever has a weight 16, which, as it is adjusted or engaged to one or another of the eyes 17, will cause its respective apron-section C to exert a greater or less pressure on the material, or more or less weights can be connected to a lever, as seen fit.

The sections of the plaiter or apron C are so arranged in connection with the levers and weights as to be independent of one another, thus allowing each apron-section to be weighted, so as to create more or less fulling action in such places as needed. If one edge of felt is thinner than another—as, for example, in piano-hammer felts—the treble or thin edge has to be made harder or firmer than the thick or bass edge. The sectional apron or plaiter C, as noted, can have the respective sections so weighted or arranged as to give the material any degree of firmness desired from treble to bass.

The felt or material, as an endless band, being fed under the sectional apron will form a series of plaits throughout its entire width, and these plaits are more or less worked or fulled by increasing, decreasing, or adjusting the weights attached to the levers 12, which, as already seen, are respectively connected to sections of the apron.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with feeding-rollers, one of which is movable toward and from the other, of an apron composed of a plurality of independently-movable sections supported from and moving vertically with the said movable feed-roller, and independent devices for pressing the apron-sections downward, substantially as described.

2. The combination with feeding-rollers one of which is movable toward and from the other, of an apron composed of a series of independent sections, each section having its independent actuating mechanism substantially as described.

3. The combination with feeding-rollers one of which is movable toward and from the other, of an apron composed of a series of independent sections, and an adjustable weight for each section substantially as described.

4. The combination with feeding-rollers one of which is movable toward and from the other, of an apron composed of a series of independent sections, and a series of independent levers to which the sections are respectively linked, each lever being provided with an adjustable weight substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN W. MILLET.

Witnesses:

WILLIAM M. LOUCKS,

WILLIAM SCHUCHARDT.