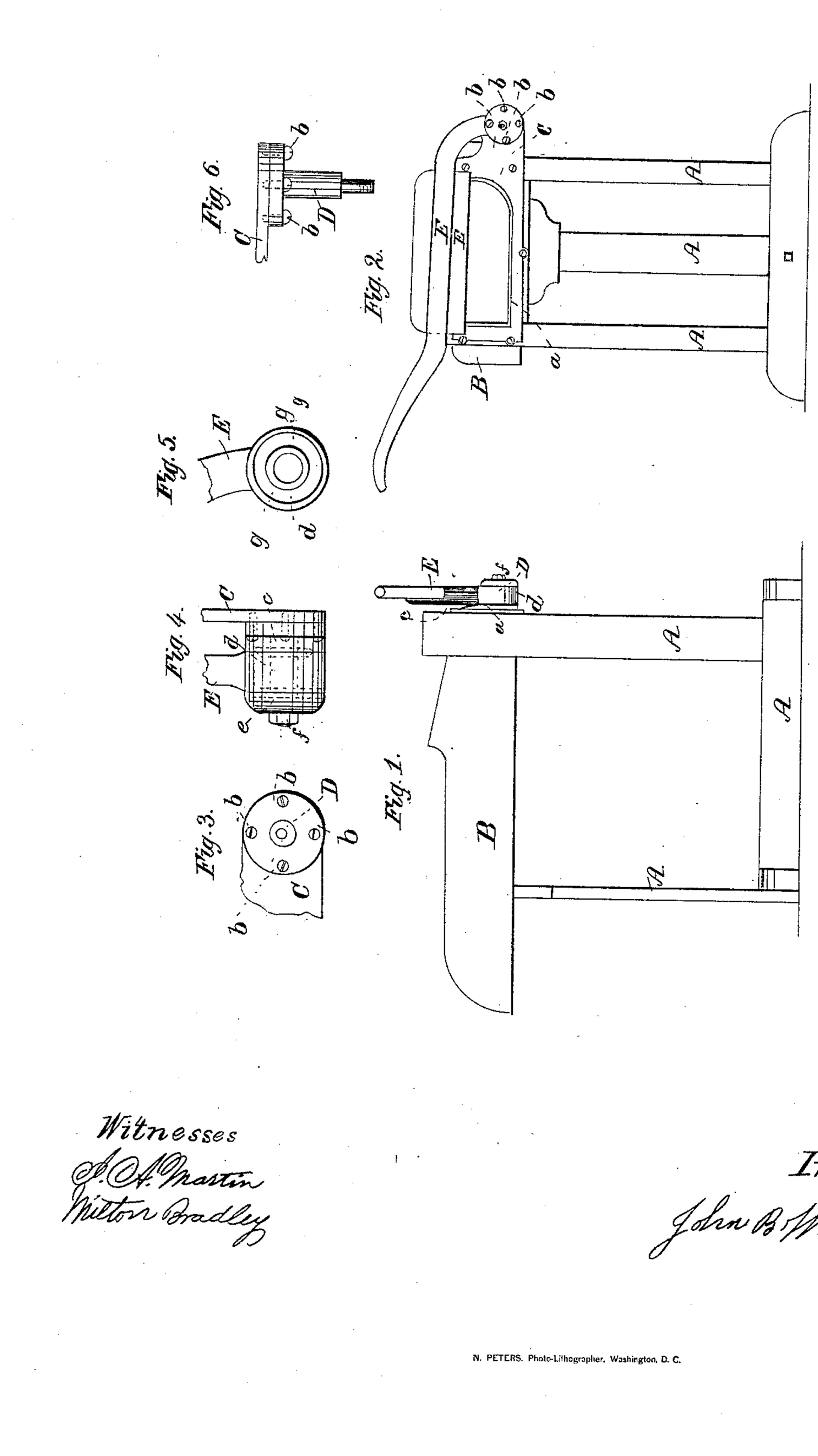
J. R. WHITTEMORE

Straw Cutter.

No. 32,936. Patented July 30, 1861.



Witnesses
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JNO. R. WHITTEMORE, OF CHICOPEE FALLS, MASSACHUSETTS.

ADJUSTING-KNIFE OF FEED-CUTTERS.

Specification of Letters Patent No. 32,936, dated July 30, 1861.

To all whom it may concern:

Be it known that I, JOHN R. WHITTEMORE, of Chicopee Falls, in the county of Hampden and Commonwealth of Massachusetts, have invented a new and useful Improvement in Hay and Straw Cutters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of these specifications, in which—

Figure 1 is a side view of the machine, and Fig. 2, a front view of the same. Figs. 3, 4, 5, and 6 are details of the adjustable joint.

My invention relates to that class of hay and straw cutters known as the "lever cutter", in which the knife is attached to a lever and cuts by coming in contact with a stationary bed-piece, on the principle, somewhat, of a pair of shears.

In the drawings, like letters of reference indicate the same parts in each of the several figures.

A, is a frame of wood as ordinarily constructed, supporting a box B, to receive the substance to be cut.

C is a cast iron mouth piece, having cast in one piece with it the stud or fulcrum pin, D, which serves as a fulcrum for the lever E. It has not heretofore been practicable to attach the stud permanently to the mouth piece because there must be some means of adjusting the bearing of the lever so as to continually keep the knife F, in close contact with the cutting edge *a* on the mouth-piece. But this is now rendered possible and practicable by my adjustable joint which I will proceed to describe in detail. There are two ways in which a lever supported on a stud as a fulcrum can receive stiffness in a direction parallel to the axis of the stud. One is by giving the lever a long bearing on the stud, and the other is by giving the lever large bearing surfaces on the parallel faces of the hub; and it is this latter arrangement that forms the basis of my adjustable joint. At the foot of the stud D, and within the circumference of a circle equal in diameter to the collar *c*, I insert the screws *b*, *b*, *b*, *b*, into the mouth piece C. On the stud D, I next place the collar *c*, fitting loosely on the stud, and having indentations on its back face corresponding to the heads of the screws *b*, *b*, *b*, *b*. I next put on the lever E, having a hub *d*, then another washer or collar *e*, confining the whole with a nut *f*.

I make the hub *d*, and also the collars *c*, and *e*, of suitable diameter to give large bearing surfaces on their faces. To save time and labor in fitting these faces to each other I form in each one an annular groove *g*, seen in Fig. 5, which represents a side of the hub *d*. Now it will be readily seen that by turning one or more of these screws out or in the position of the face of the collar *c*, is changed and consequently the position of the lever and knife, and by means of these screws the knife can be accurately adjusted to the mouthpiece.

Having fully described the construction and operation of my invention, what I claim as new and desire to secure by Letters Patent is—

The screws *b*, *b*, *b*, *b*, when applied and operating substantially in the manner and for the purpose herein described.

JOHN R. WHITTEMORE.

Witnesses:

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