J. R. Whittemore.

Feed Cutter.

No. 36,316. Patented Aug. 26, 1862.

Fig. 6.

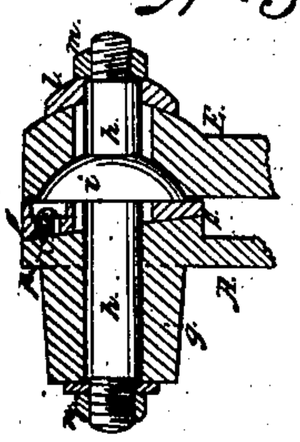


Fig. 7.

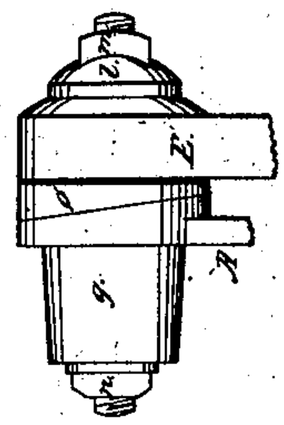


Fig. 2.

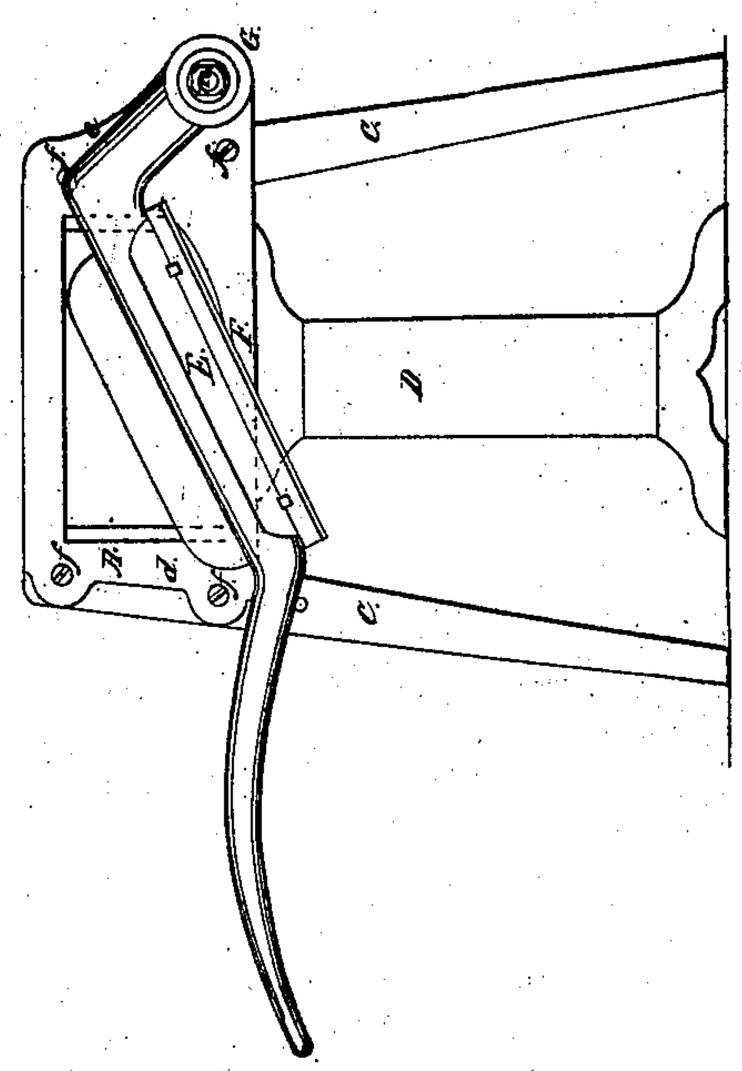


Fig. 4.

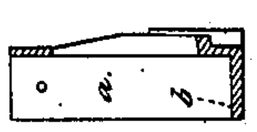


Fig. 5.

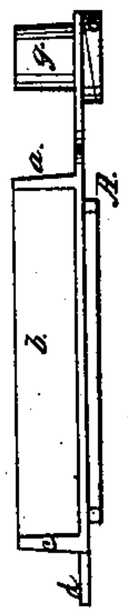


Fig. 3.

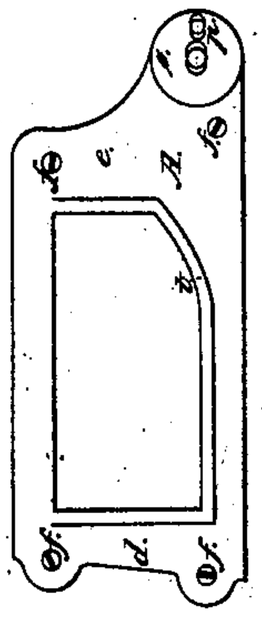
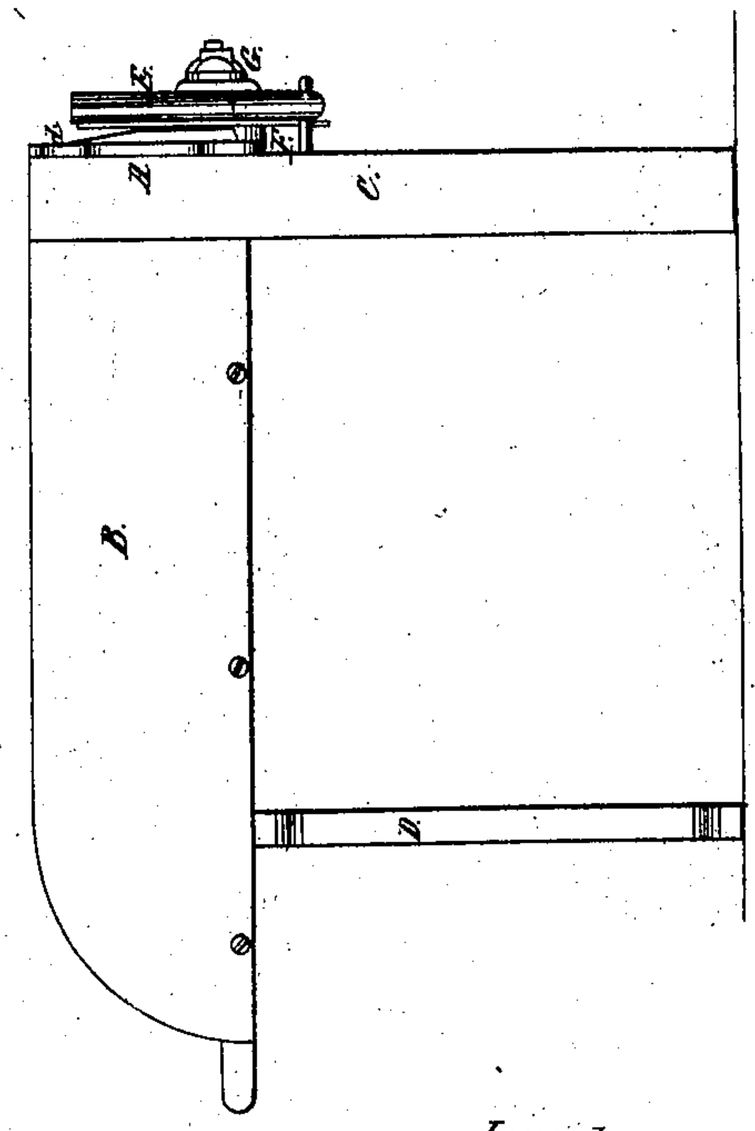


Fig. 1.



Witnesses
P. P. Colton
Milton Bradley

Inventor:
Jonathan R Whittemore

UNITED STATES PATENT OFFICE.

JONATHAN R. WHITTEMORE, OF CHICOPEE FALLS, MASSACHUSETTS.

HAY AND FEED CUTTER.

Specification of Letters Patent No. 36,316, dated August 26, 1862.

To all whom it may concern:

Be it known that I, JONATHAN R. WHITTEMORE, of Chicopee Falls, in the county of Hampden and Commonwealth of Massachusetts, have invented a new and useful Improvement in Feed-Cutters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of these specifications.

My invention relates to the class of feed cutters known as lever cutters in which a single knife is attached to a lever and cuts against a mouthpiece, or bed-piece, in the manner of a pair of shears. In this class of cutters there has been much difficulty in keeping the movable knife pressed against the stationary bed piece throughout its whole cut, owing to the leverage exerted on the bearing or fulcrum of the lever and the constant wear on the knife and bed piece.

Now the object of my invention as herein described is two-fold. First to overcome the above difficulty in regard to the cutting device and also to cheapen the construction of the machine and render it more portable for shipping.

In the drawings making a part of these specifications Figure 1 is a side elevation of a cutter complete. Fig. 2 is a front end view of the same. Fig. 3 is a front view of the mouth piece detached, and Fig. 4 a section, and Fig. 5 a top view, of the same. Fig. 6 is a section of the fulcrum or bearing of lever drawn to a larger scale and Fig. 7, a top view of the same.

In the construction of the machine I provide the mouth piece A, with flanges *a*, *b*, *c*, *d*, *e*, to which the wooden portions of the machine are attached, thereby making the mouth piece the principal piece of the machine, supporting the other parts instead of being a simple plate attached to the wooden frame. Thus making as good a machine at a much less expense.

B, is a box or hopper of wood attached to the flanges *a*, *b*, *c*, of the mouth piece.

C, C, are the two principal legs of the machine attached to the flanges *d*, *e*, by the screws or bolts *f*, *f*.

D, is a back leg, attached by screws to the underside of the hopper, merely serving to support the back end, the legs C, C, receiving all the strain and force of the cutting.

t, is a lip on the front of the mouth piece to form a cutting edge for the knife to cut against.

E, is the cutter lever having attached to it the knife F, and working on a fulcrum at G, attached to an extended portion of the mouth piece. The construction of the fulcrum is seen in detail at Figs. 6 and 7.

g, is a hub on the back of the mouth piece A.

h, is a bolt passing through this hub.

i is a segment of a sphere or ball on the bolt *h*, and forming a part of it. The end of the lever E is formed to receive this spherical portion *i*, of the bolt *h*, and has a hole, through which the front end of the bolt *h*, passes, the hole being enough larger than the bolt to allow the lever to be moved around on the bolt, on the principle of a ball and socket joint.

l, is a washer made of a suitable form to fit the outside of the lever E, which is made concentric with the spherical portion *i*, of the bolt.

m, is a nut on the front end, and *n*, a nut on the back end of the bolt *h*.

o, is a wedge attached to the front of the mouth piece by the screw *p*, the screw hole in the wedge being slotted as also is the hole through which passes the bolt *h*.

Now the cutting device is adjusted as follows: Both nuts being loosened, slide the wedge back or forward to set the cutting lever in or out, and when properly adjusted, tighten the screw *p*, having removed the bolt and lever for the purpose. Now return the bolt to its place and screw the back nut *n*, on sufficiently to make a good firm fit. Then put the lever on to the bolt, followed by the washer *l*, and nut *m*. Next adjust the knife to the mouth piece in such manner as to produce the desired cut, which can be done exactly, as the lever is free to move in any direction on the ball *i*. Having done this tighten the nut *m*, which confines the lever to the ball, the surface of the ball being large enough so that the friction will hold the lever securely in place. Thus it is seen that the lever is free to be adjusted to fit the mouth piece under any circumstances, and to produce any cut desired. Now in shipping, machines of this description, if sent complete, they occupy a great amount of room and render their transportation expensive, but when constructed in this manner the legs may be removed simply by

removing two screws or bolts from each, and then all packed into the hopper, thereby saving a large portion of the room now occupied by cutters of this class, which together with the saving in expense in the original manufacture is an important item.

Now having fully described the construction and operation of my invention what I claim as new and desire to secure by Letters Patent is:

1. The combination of the hopper B, legs C, C, and flanged mouth piece A, constructed as herein described, whereby the mouth piece serves as a support for B and C, substantially in the manner and for the purpose as herein set forth.

2. The combination of the cutter lever E, bolt *h*, and wedge *o*, when constructed and operating substantially in the manner and for the purpose herein described.

JONATHAN R. WHITTEMORE.

Witnesses:

B. P. COLTON,

MILTON BRADLEY.