

D. PORTER.
Straw Cutter.

No. 43,459.

Patented July 5, 1864.

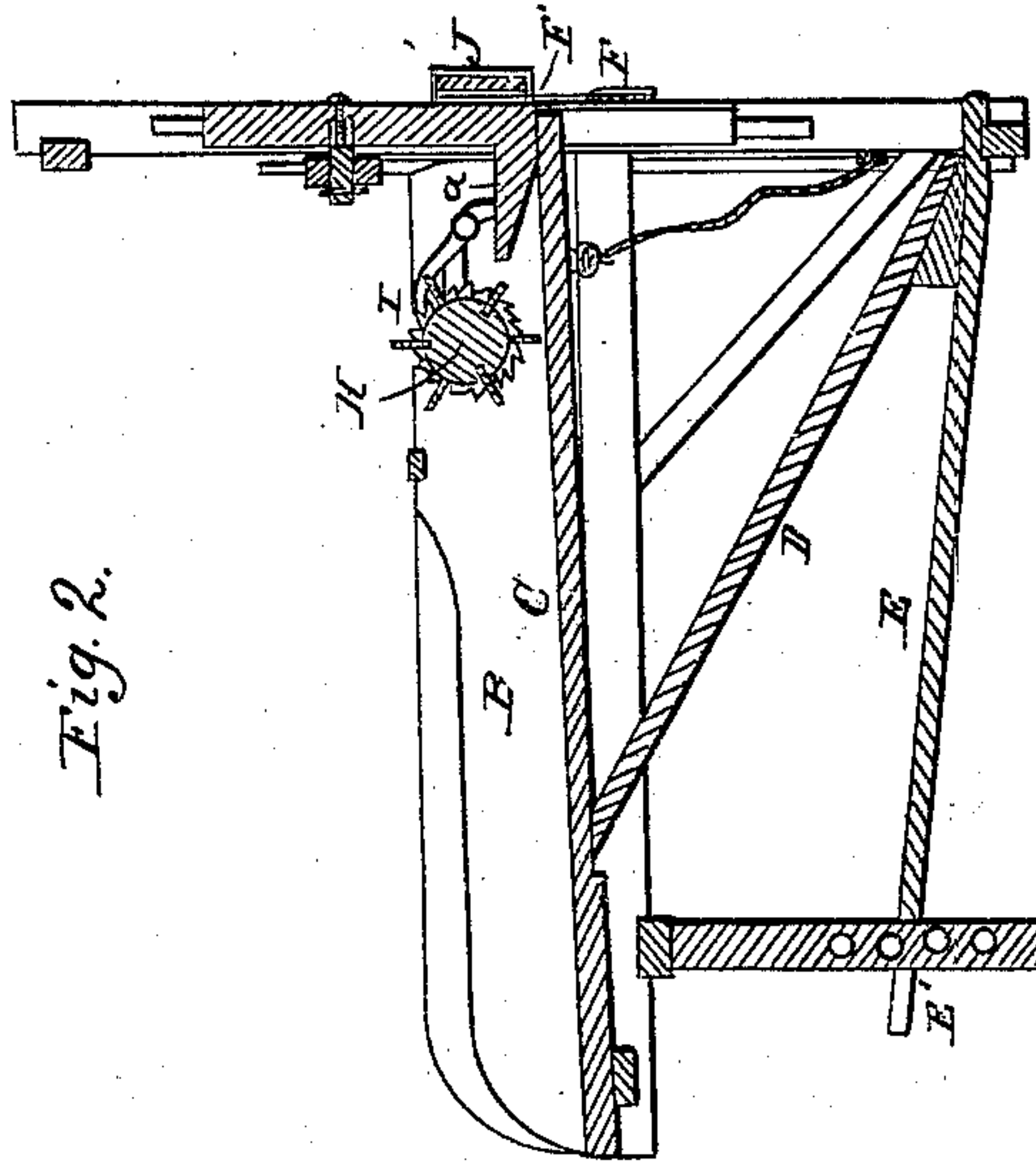


Fig. 2.

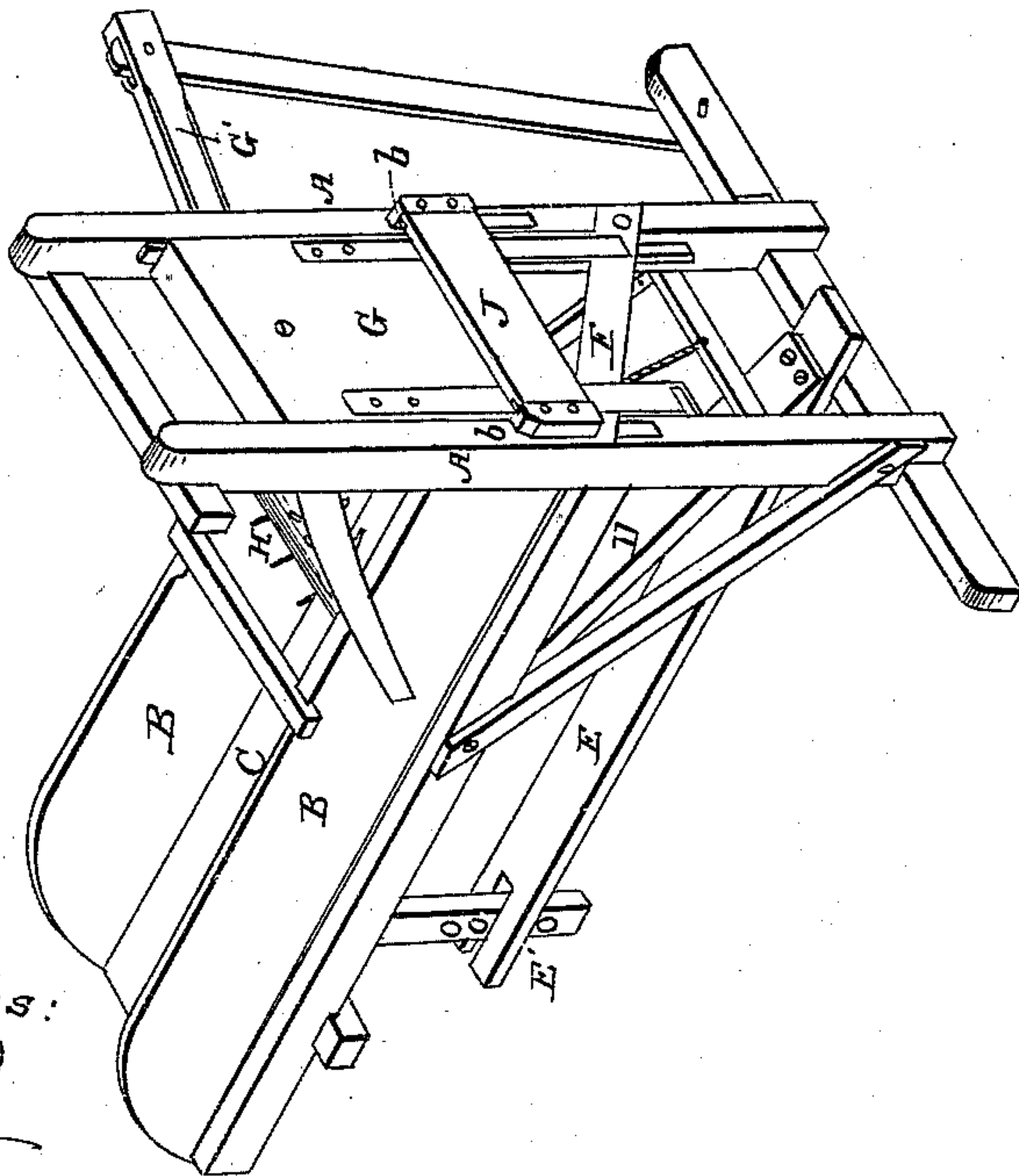


Fig. 1.

Witnesses:

J. Brainerd
A. Moore

Inventor:

D. Gray Porter.
By Burdette & Co.

UNITED STATES PATENT OFFICE.

D'ARCY PORTER, OF CLEVELAND, OHIO, ASSIGNOR TO HIMSELF AND K. SMITH, OF SAME PLACE.

STRAW-CUTTER.

Specification forming part of Letters Patent No. 43,459, dated July 5, 1861.

To all whom it may concern :

Be it known that I, D'ARCY PORTER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Hay and Straw Cutters; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a vertical longitudinal section.

Like letters refer to like parts in the several drawings.

My invention relates to such a construction that the bottom board of the cutting-box moves up and down to correspond with the motion of the moving knife.

A represents the stationary part of the frame, and B represents stationary side pieces of the straw-box.

C represents the bottom board, which is mounted upon spring-boards D E.

F represents the stationary knife, which is secured to the stationary frame A. The moving knife F' is secured to the sliding cross-head G, which is operated by means of the lever G'. Upon the inside of the cross-head G' is a pressure-board, *a*, which is attached to the cross-head and moves with it. This is beveled upon the under side to freely admit the raw.

H represents a feed-roller, the journals of which are in the side pieces, B. It is operated by a pawl and ratchet, as shown at I. The spring-board E can be graduated to different degrees of pressure by pins E'.

In the operation of this machine the straw is pressed between the bottom board, C, and the pressure-board *a*, and is fed to the knife by the pawl and ratchet, as shown in Fig. 2. Every downward stroke of the lever G' carries with it the cross-head, bottom board, C, and straw, giving the spurs on the feed-roller a new hold upon the straw. The length of the cut is regulated by a stop-plate, J, in front of the moving knife. This plate is adjustable by placing it in different grooves, as shown at *b b* in Fig. 1.

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

1. The arrangement and combination of the springs D E, bottom board, C, knives E and F', and feed roller H, for the purposes herein set forth.

2. In combination with the above-named parts, the adjustable plate J, for the purposes described.

D'ARCY PORTER.

Witnesses:

W. H. BURRIDGE,
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