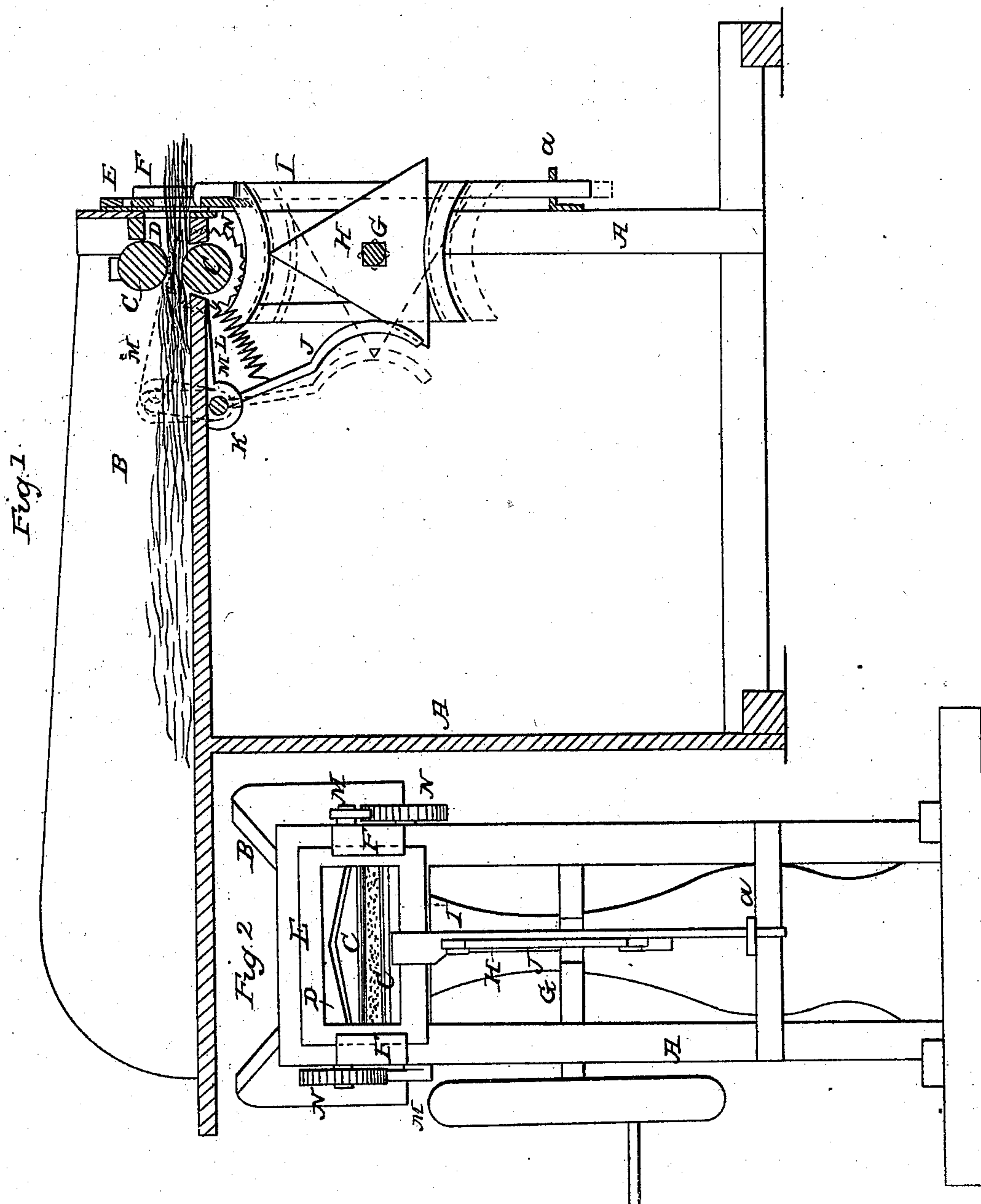


I. ROSE.
Straw Cutter.

No. 12,694.

Patented April 10, 1855.



UNITED STATES PATENT OFFICE.

IRA ROSE, OF AKRON, OHIO.

STRAW-CUTTER.

Specification of Letters Patent No. 12,694, dated April 10, 1855.

To all whom it may concern:

Be it known that I, IRA ROSE, of Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Straw and Stalk Cutters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a longitudinal vertical section of my improved straw and stalk cutter. Fig. 2, is a front view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

The nature of my invention consists in the peculiar means employed for operating the knife and feed rollers as will be hereafter fully shown and described.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents the frame of the machine on the upper part of which is placed the usual feed box B, having two rollers C, C, and a knife D, at one end.

The knife D, is placed in a frame E, which works between guides F, F, as shown in Fig. 2, the guides being secured on the front end of the frame A. The knife D, has inclined edges which meet at a point in the center as shown in Fig. 2, the edges inclining upwards from their outer ends toward the center.

G is a transverse shaft which runs in suitable bearings in the frame A. On this shaft there is hung a triangular shaped cam H, clearly shown in Fig. 1. This cam H, works within a yoke I, the upper and lower ends of which are of convex form. The upper part of the yoke I, is attached to the lower part of the knife frame E, and the lower part of the front strip or side piece of the yoke works in a guide (a).

J is a lever attached to a transverse shaft

K. The lower end of this lever bears against the edge of the cam H, in consequence of a spring L. At each end of the shaft K, there is a pawl M, which gears into ratchets N, N, at the ends of the rollers C, C, each roller being provided with a ratchet, see Fig. 2.

Operation. By turning the shaft G, the cam H, gives a reciprocating motion to the yokes I, and knife D, and also gives a rocking or reciprocating rotary motion to the shaft K, by acting against the lower end of the lever J, the spring L, giving the return motion to the lever after the prominences of the cam have passed it. The pawls M, M, being attached to the shaft K, act against the ratchets N, N, and rotate intermittently the rollers C, C. The straw or stalks to be cut being placed in the feed box B, the rollers C, C, feed it to the knife, the straw or stalks passing between the rollers, and the knife as it passes downward cuts the straw or stalks in the usual manner.

By this arrangement or device the knife and feed rollers are operated by the revolutions of a cam only.

The device is simple, not liable to get out of repair, and may be economically manufactured.

I do not claim the feed rollers, neither do I claim the knife, for these are well known and in common use. But what I do claim as new and desire to secure by Letters Patent is—

The combination of the cam H, yoke I, and lever J, with the rock shaft K, and pawls M, M, the above parts being constructed, arranged and operating in the manner and for the purpose as herein shown and described.

IRA ROSE.

Witnesses:

H. B. HORTON,
J. HOLMES.