F. B. HUNT.

Straw Cutter.

No. 26,637. Patented Dec. 27, 1859.

FIG. 1.

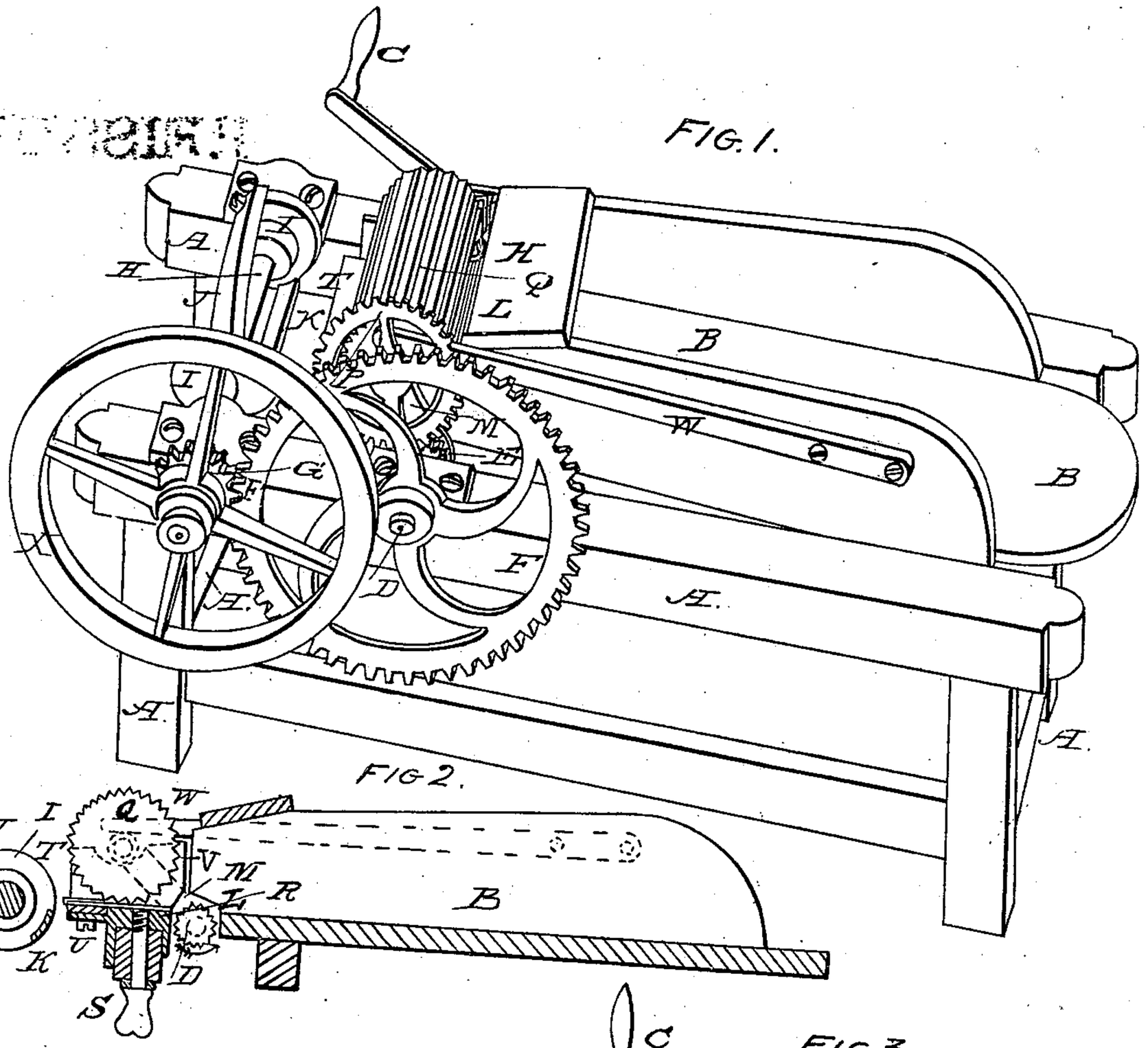


FIG 2.

FIG. 3

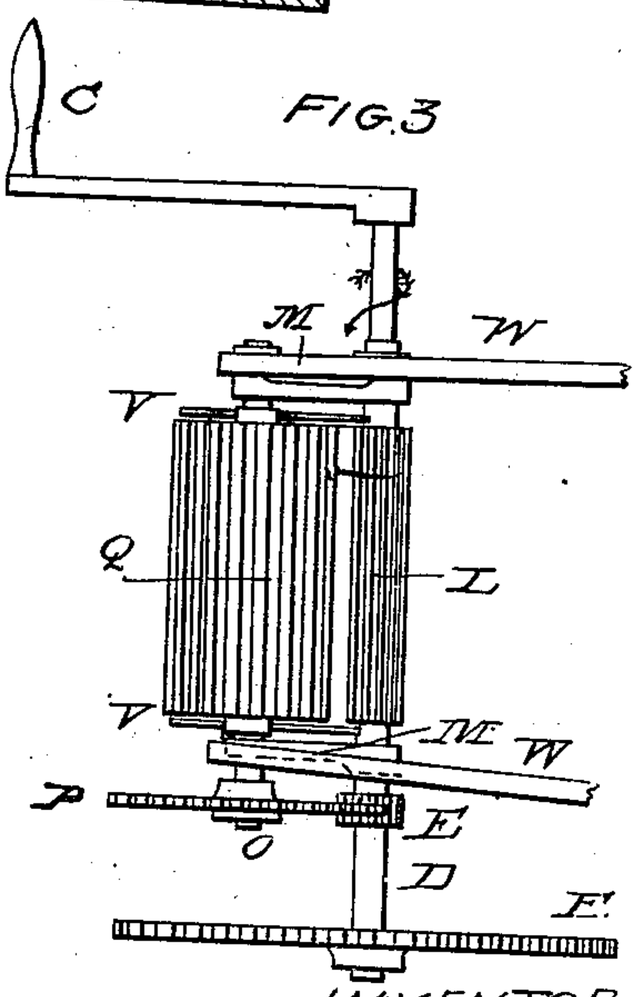
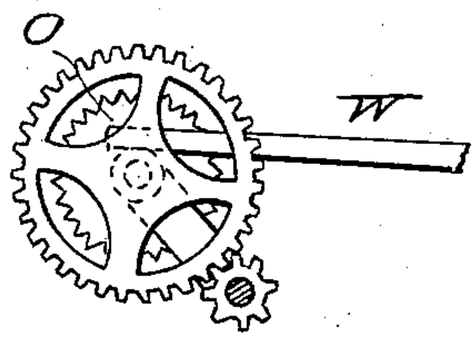


FIG. 4.



WITNESSES

H. E. Clifton

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UNITED STATES PATENT OFFICE.

FRANKLIN B. HUNT, OF CINCINNATI, OHIO, ASSIGNOR TO R. D. VAN DEURSEN AND J. B. GIBBS, OF SAME PLACE.

STRAW-CUTTER.

Specification forming part of Letters Patent No. 26,637, dated December 27, 1859; Reissued January 14, 1868, No. 2,838.

To all whom it may concern:

Be it known that I, FRANKLIN B. HUNT, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Machines for Cutting Stalks, Straw, &c.; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, making part of this specification.

The nature of my invention relates to the arrangement and combination of the several parts constituting the device for feeding the stalks, straw &c. to the cutting cylinder substantially as hereinafter represented and described.

With reference to the accompanying drawings Figure 1. is a perspective representation of my improvement and its application to a complete machine. Fig. 2. is a sectional view. Fig. 3. is a plan of the feeding device. Fig. 4. a sectional elevation of the same.

A. is the frame.

B. is a receiving or feeding trough fast to the frame.

C. is a crank for operating the machine, and is fast to the shaft D.

On shaft D. is the pinion E. and wheel F. Wheel F. plays into pinion G. on shaft H. to communicate motion to the cutting cylinder, which is also fast on shaft H. and is composed of the two circular heads I. and the knife J, one or more of which may be used with or without the connecting bar K. The heads I. are fitted to the shaft H. and fastened by means of a set screw in the hub of each. The knife J. is secured by means of a screw at each end, to the heads I.

On shaft D. is secured a small fluted roll or cylinder L. On shaft D. is also fitted one end of each of the two links M. The opposite ends of these links form the bearings for and carry the shaft O.

On shaft O. is the gear wheel P. which plays into and is driven by the pinion E. so giving motion to the fluted cylinder or upper feed roll Q. on shaft O. A plate R. is secured to the frame by means of the screw S. and forms a seat for the shear blade T. which is adjusted by means of two screws U. so that its edge shall be close to the knife J. as it passes in its revolution.

On the ends of the plate R. is fast the two rest-blocks V. on which the shaft O. or the hubs on the ends of cylinder Q. rest when pressed down by the springs W. The springs W. press upon the upper ends of link-bearings M. and so keep the feed roll or cylinder Q pressed down into contact with any straw or other material passing under it. These springs W. yield upward to allow the free passage of the ever varying thicknesses of matter required to pass under the roll Q. The motion of roll Q. up and down is through the arc of a circle whose center is the axis of roll L. the effect of which is to shorten the operative length of the springs W. whenever large matter passes under the roll Q. so increasing their effect at the proper time. The rest-blocks V. are of such a height as to allow the roll Q. to come down close to the plate R. but not to touch it. Plate R. and part of blade T. is faced with zinc which covers their joint.

X. is a flywheel.

The parts may be made of such suitable materials as are usually employed for similar purposes.

Having described the construction of my improved straw and stalk-cutter the operation is as follows: Motion is given to shaft D. and feed roll L. by means of crank C. in the direction indicated by the arrows in Figs. 2, 3. By means of pinion E. and wheel P. a reverse motion is communicated to roll Q. and also by means of pinion and wheel G. F. to shaft H. and the cutting cylinder. The straw or other material to be cut is now placed in the spout B. and is carried forward by feed rolls Q. L. and passing over the shear-blade T. is cut by the revolving knife or knives J. and falls into any suitable receptacle arranged below.

Having described the construction of my improved machine, what I claim therein as new, and desire to secure by Letters Patent, is as follows:

I claim the described feeding device consisting essentially of the rolls Q. L. link-bearings M. rest-blocks V. and springs W. all arranged with reference to each other and so as to operate conjointly as and for the purpose set forth.

In testimony of which invention I have hereunto set my hand.

FRANKLIN B. HUNT.

Witnesses:

H. E. CLIFTON,

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