

(Model.)

2 Sheets—Sheet 1.

A. BRANDT.

FEED CUTTER.

No. 258,013.

Patented May 16, 1882.

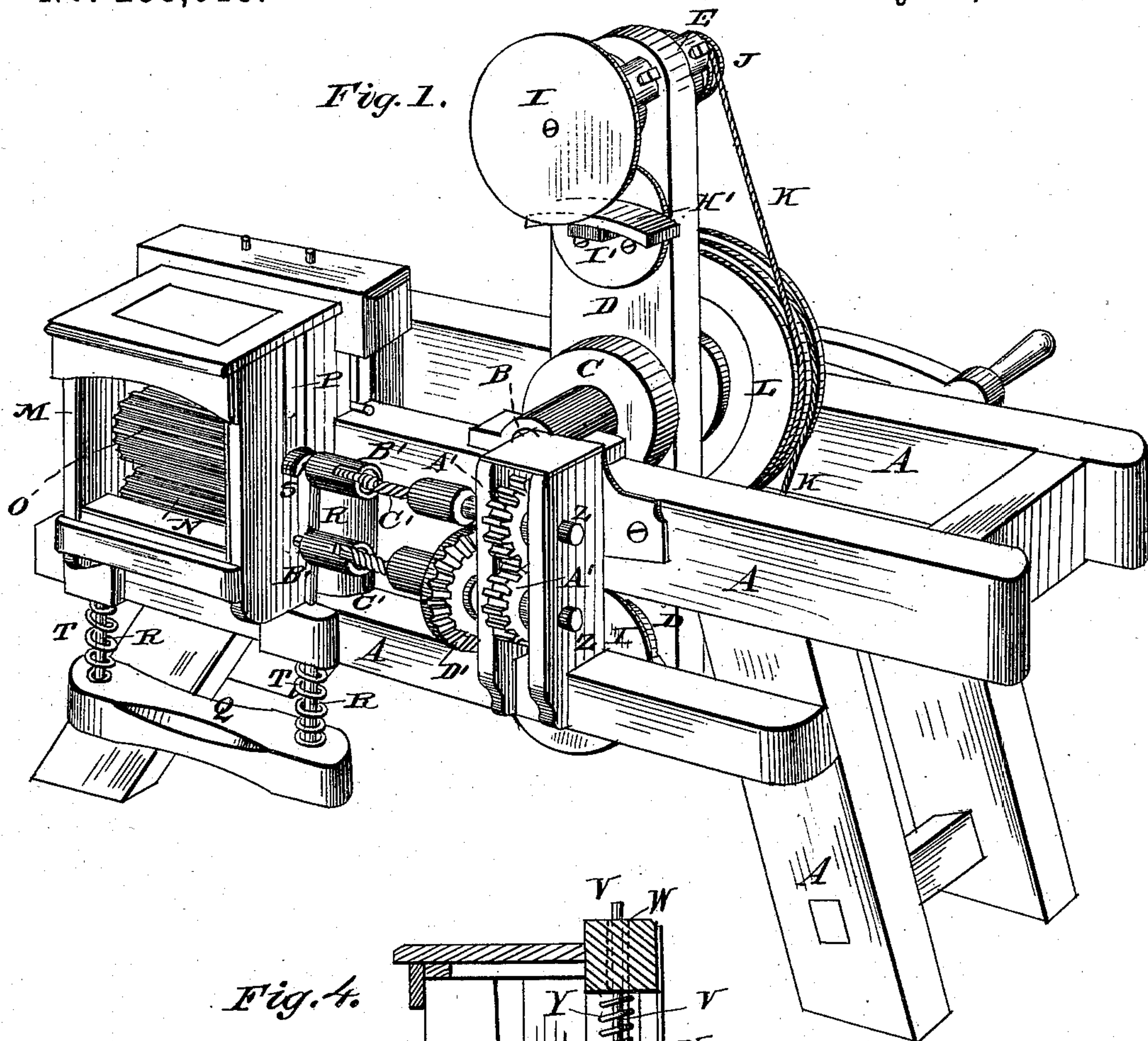
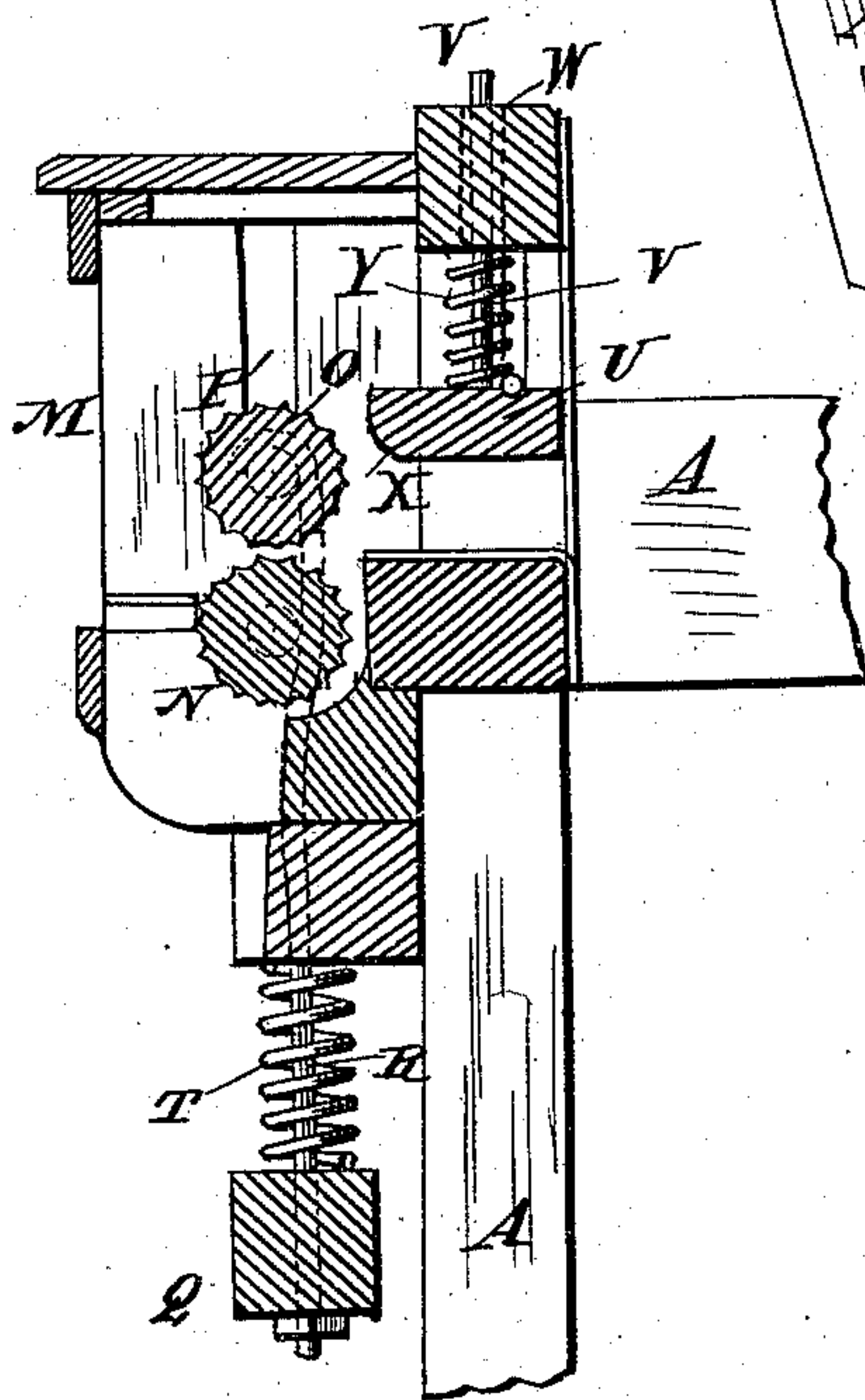


Fig. 4.



WITNESSES:

Fred. L. Dieterich
P. C. Dieterich

INVENTOR.

August Brandt
by C. A. Snow & Co.
ATTORNEYS.

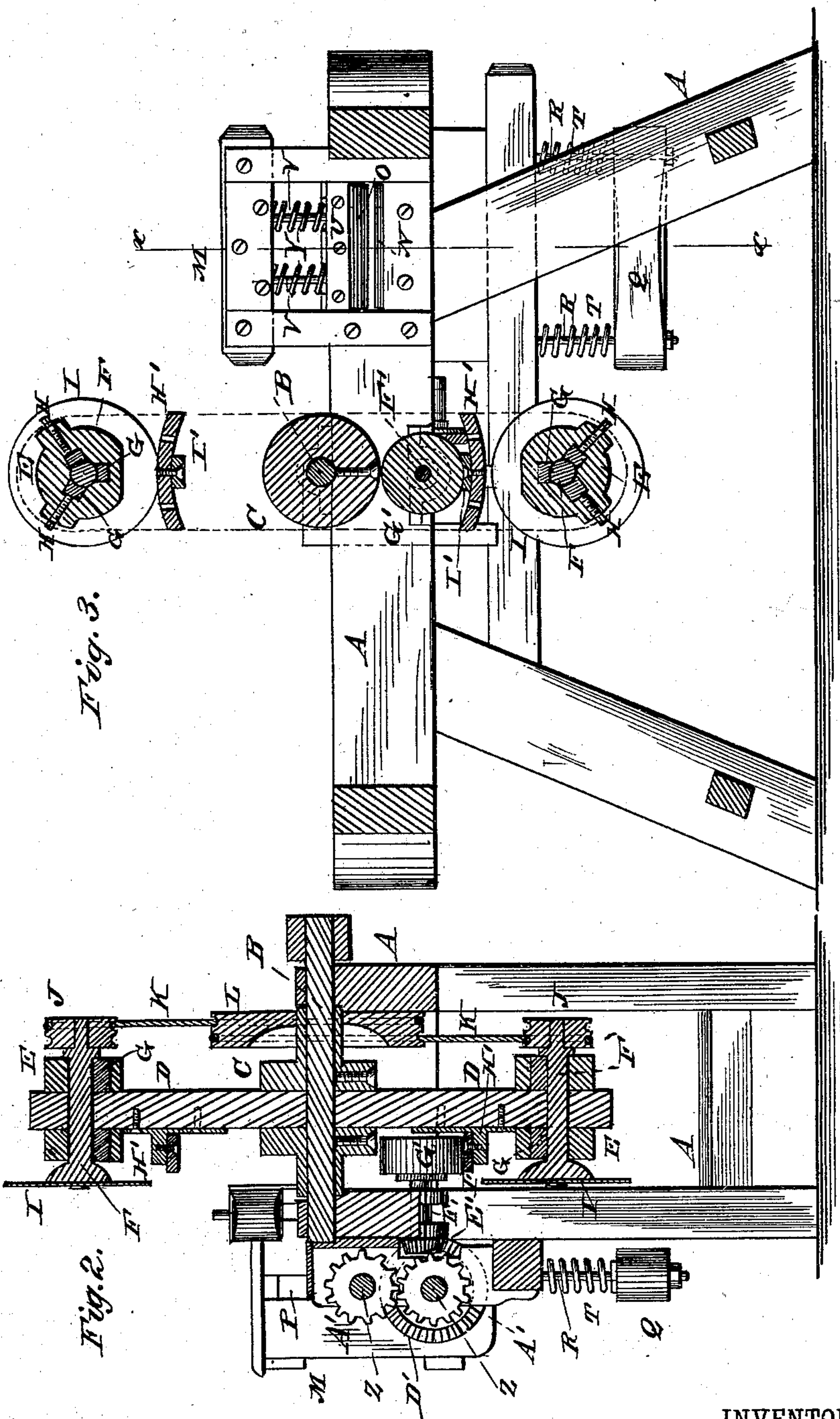
(Model.)

2 Sheets—Sheet 2.

A. BRANDT.
FEED CUTTER.

No. 258,013.

Patented May 16, 1882.



WITNESSES:
Fred. L. Dietrich
P. L. Dietrich

INVENTOR.
August Brandt
by *E. A. Snow & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

AUGUST BRANDT, OF FORT WAYNE, INDIANA.

FEED-CUTTER.

SPECIFICATION forming part of Letters Patent No. 258,013, dated May 16, 1882.

Application filed March 11, 1882. (Model.)

To all whom it may concern:

Be it known that I, AUGUST BRANDT, of Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Feed-Cutters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my improved machine for cutting straw, tobacco, &c. Fig. 2 is a vertical sectional view taken longitudinally through the main shaft. Fig. 3 is a longitudinal sectional view of the machine; and Fig. 4 is a section on the line *x x*, Fig. 3.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to machines for cutting straw, tobacco, &c.; and it consists in certain improvements in the construction of the same which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents a suitably-constructed frame, the sides of which are provided with boxes or bearings for the main shaft B. Mounted securely upon the main shaft is a disk or hub, C, having arms D D, which project in opposite directions. The arms D are provided at their ends with boxes E, in which the short transverse shafts F are journaled, the bearings for said shafts being formed by blocks G, adjustable in the boxes E by set-screws H. The shafts F carry at their front ends the circular knives or cutters I and at their rear ends pulleys or band-wheels J, connected by bands or belts K K with an annularly-grooved disk, L, secured to the side of the frame A, as shown. By this arrangement, when the main shaft is revolved the shafts F, carrying the circular cutter, will be revolved at a speed which, by properly changing the proportions of the band-wheels J and grooved disk L, may be regulated as desired.

M is a box secured to the front side of the frame, and having bearings for the feed-rollers, which are corrugated longitudinally, as shown. The lower feed-roll, N, is journaled permanently in its bearings. The upper roll, O, is mounted in slots P in the sides of the box M, so that it may slide vertically.

Q is a cross-bar arranged under box M, and having upward-projecting arms R, provided at their upper ends with hooks S hooking upon the shaft of the upper feed-roll. Springs T, coiled upon the arms R, are interposed between the cross-bar Q and the bottom of box M, (or under side of the frame A,) thus forcing the said cross-bar Q, arms R, and the upper feed-roll in a downward direction.

U is a plate arranged in box M in rear of the feed-rolls, and having arms or studs V projecting into vertical slots W in the sides of said box, in which the said plate may thus slide vertically. The front side of plate U is beveled at X, so that the material to be cut will readily pass from between the feed-rollers under said plate, which, by suitably-arranged springs Y, is forced in a downward direction, so as to hold the material securely while being cut by the rotary knives, which have been above described, and which of course must be so adjusted as to sweep by the discharge end of the box.

Journaled in suitable bearings on the front side of frame A are a pair of short shafts, Z Z, having intermeshing pinions A'. The shafts Z are connected by universal coupling-joints B' and rods C' with the shafts of the feed-rolls, which are in this manner operated, the upper feed-roll, owing to the universal coupling-joint, operating equally well at any position which it may happen to occupy in relation to the lower feed-roll. One of the shafts Z has a bevel-gear, D', meshing with a pinion, E', upon a short shaft, F', carrying at its rear end a friction-wheel, G'. The latter is operated intermittently by means of curved or coneave shoes H', secured upon the arms D of the main shaft B, and having rubber cushions or blocks I', which, by coming in contact with the friction-wheel G', turn it for a distance regulated by the length of said blocks, thus operating the feed mechanism.

By regulating the size of the blocks I' the length of the feed may be regulated, and it will be observed that owing to the construction described the material to be cut is only fed when the knives or cutters are at the greatest distance from the feed-box. At all other times it is stationary.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the feed-rollers, the couplings B' C', the shafts Z, having intermeshing pinions A' and bevel-gear D', the shaft F', having pinion E' and friction-wheel G', and the
5 main shaft having arms D, carrying the rotary cutters, and shoes H', provided with rubber blocks I', substantially as set forth.

In testimony that I claim the foregoing as my own-I have hereto affixed my signature in presence of two witnesses.

AUGUST BRANDT.

Witnesses:

JOHN GAETJE,
WILLIAM GRAGE.