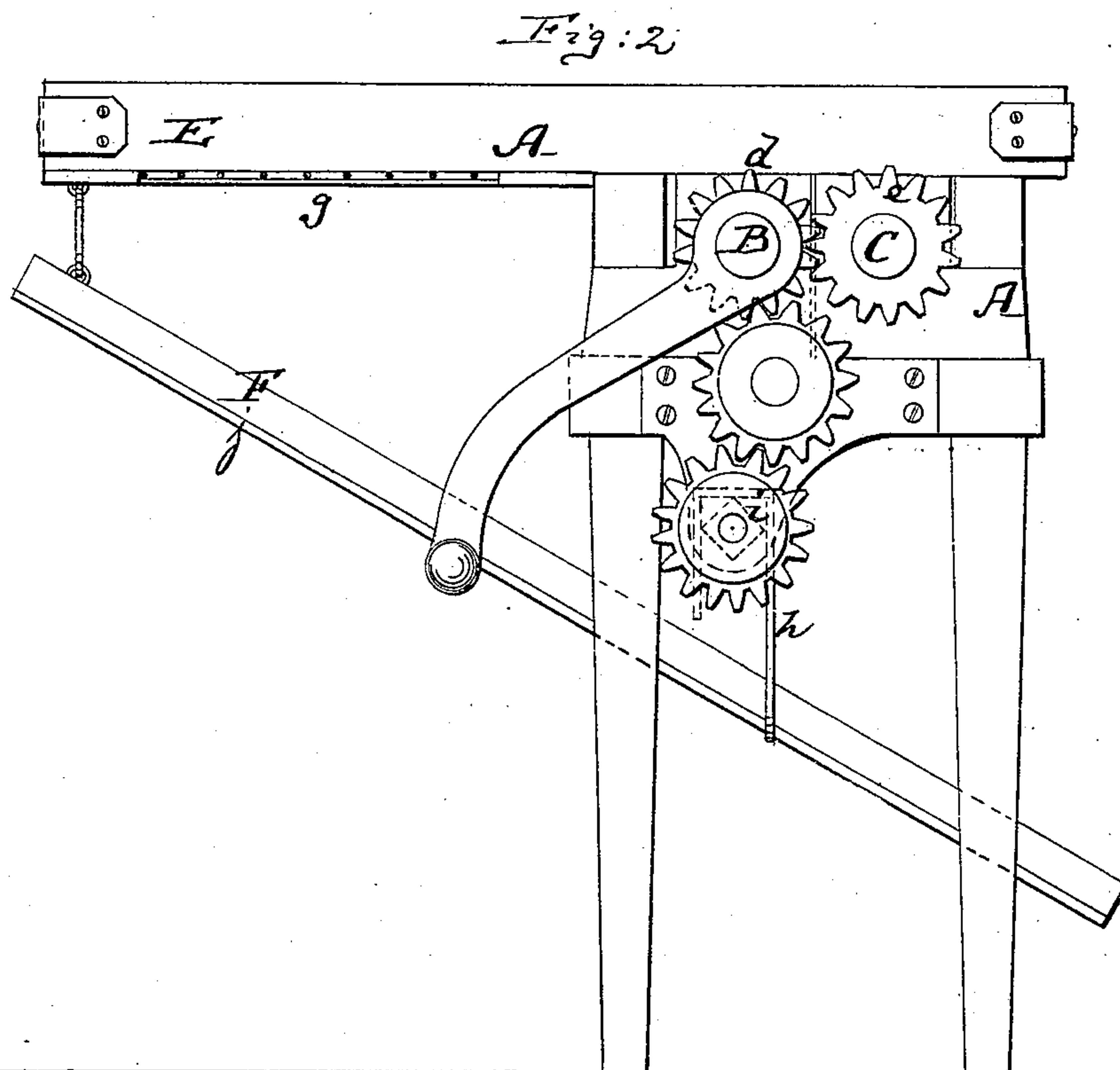
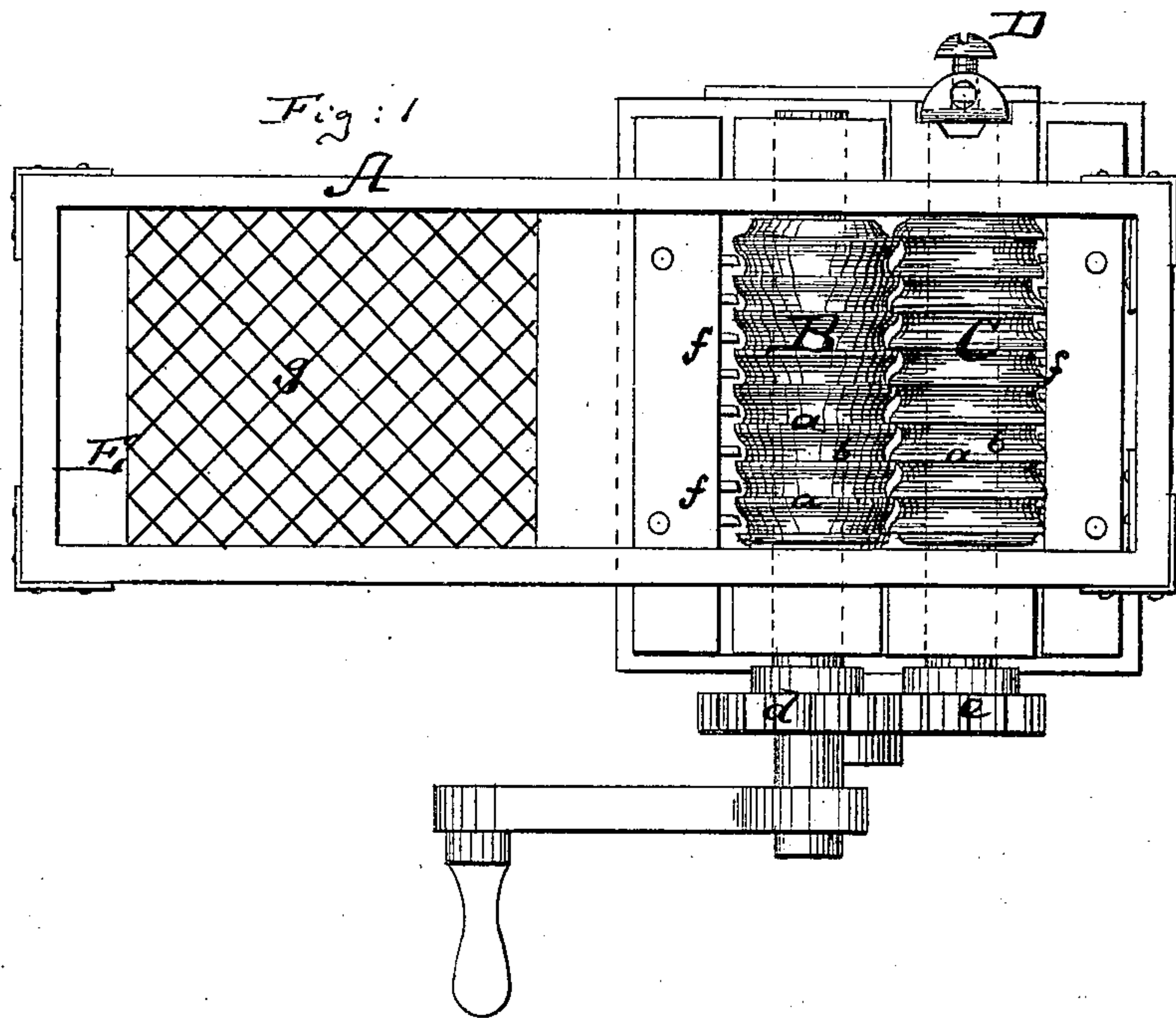


(No Model.)

2 Sheets—Sheet 1.

N. H. BORGFELDT.
Machine for Cutting Tobacco.
No. 238,755. Patented March 15, 1881.



Witnesses.

John C. Dunbridge
Henry P. Parker

Inventor.

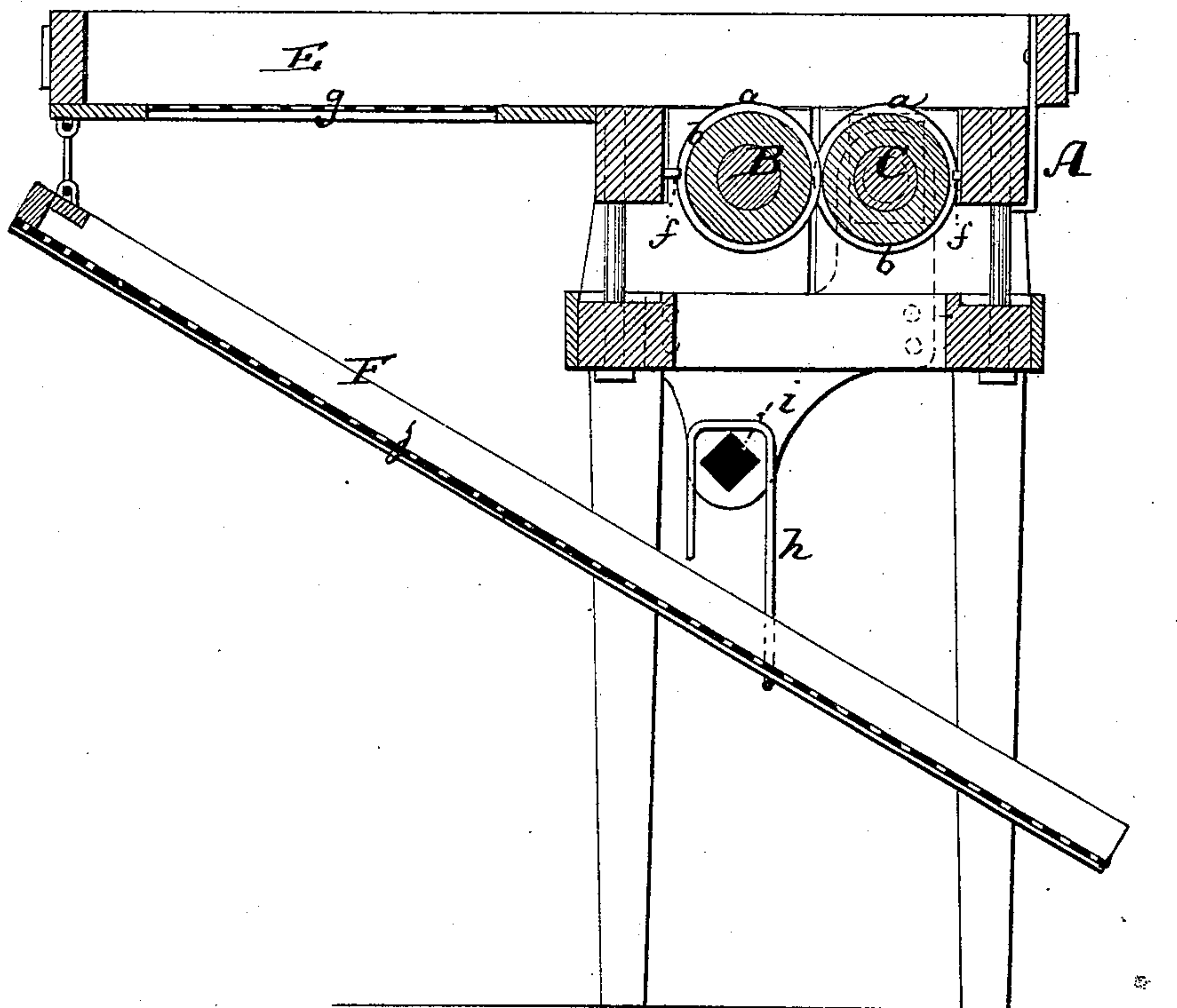
N. H. Borgfeldt
by his attorney
A. B. Briesen

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3



Witnesses.
John C. Tunbridge.
H. F. Parker.

Inventor.
N. H. Borgfeldt
by his attorney
A. B. Briesen

UNITED STATES PATENT OFFICE.

NICHOLAS H. BORGFELDT, OF NEW YORK, N. Y.

MACHINE FOR CUTTING TOBACCO.

SPECIFICATION forming part of Letters Patent No. 238,755, dated March 15, 1881.

Application filed October 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS H. BORGFELDT, of New York, in the county and State of New York, have invented a new and Improved Machine for Cutting Tobacco, of which the following is a specification.

This invention relates to certain improvements on the tobacco-cutting machine which is described in Letters Patent No. 138,606, dated May 6, 1873.

The invention consists in placing a hopping chute beneath the sieve-bottom of the feed-box for the purpose of receiving the small particles of tobacco from the feed-box, which need not be cut, and impurities.

In the accompanying drawings, Figure 1 is a top view; Fig. 2, a side elevation; Fig. 3, a vertical central section of my improved tobacco-cutting machine.

The letter A represents the frame of the machine.

B and C are the cutting-rollers, each of which is provided with a series of cutting-edges, *a*, and intervening grooves, *b*, the cutting-edges of one roller being set up against those of the other by a set-screw, D, or by a spring or weighted lever. Rotary motion is imparted to the rollers B and C by toothed wheels *d* and *e*, as shown in Fig. 1. The wheel *d* on one of the rollers is somewhat smaller than the wheel *e* on the other of said rollers, as indicated in Fig. 2. By this means the speed of the two rollers when they are revolved is not alike, and their cutting-edges *a* grind each other sharp by thus turning with different speed in contact with each other.

Into the frame A are set a series of small pins, *f*, which enter the grooves *b* of the rollers B and C, and serve as clearers. By having each of these pins *f* independent of each other their independent adjustment is rendered possible.

E is a feed-box, into which the tobacco is placed before it is moved, by hand or otherwise, to the rollers. Part of the bottom of this feed-box contains a sieve, *g*, through which the smaller particles of tobacco that are not to be cut drop down into a chute, F, which is suspended below the sieve *g* of the feed-box. The chute F receives vibratory motion by being suspended by a hook, *h*, from a prismatic or cam shaft, *i*. The chute F may have a sieve, *j*, for its bottom, for discharging through it the finest particles of tobacco or impurities, and carry along its face the less-fine particles of tobacco, which may be mixed with the cut portions that are also dropped into the chute from the rollers B and C. By this means the requisite separation of the impurities, and also of the very fine particles of tobacco, from the remainder is automatically effected.

Although I have described this as a machine for cutting tobacco, it may with equal advantage be used for cutting and separating other substances than tobacco—such as herbs used for medicinal purposes, and the like.

I claim—

1. In a tobacco-cutting machine, the stationary feed-box E, having stationary sieve-bottom *g*, in combination with a hopping chute F, which extends under the fixed sieve portion of the feed-box, substantially as described.

2. The combination of the cutting-rollers B C with the feed-box E, having sieve bottom *g*, and with the hopping chute F, having sieve-bottom *j*, that extends under the sieve-bottom *g* and under the cutting-rollers B and C, substantially as described.

NICHOLAS H. BORGFELDT.

Witnesses:

WILLY G. E. SCHULTZ,
WILLIAM H. C. SMITH.