

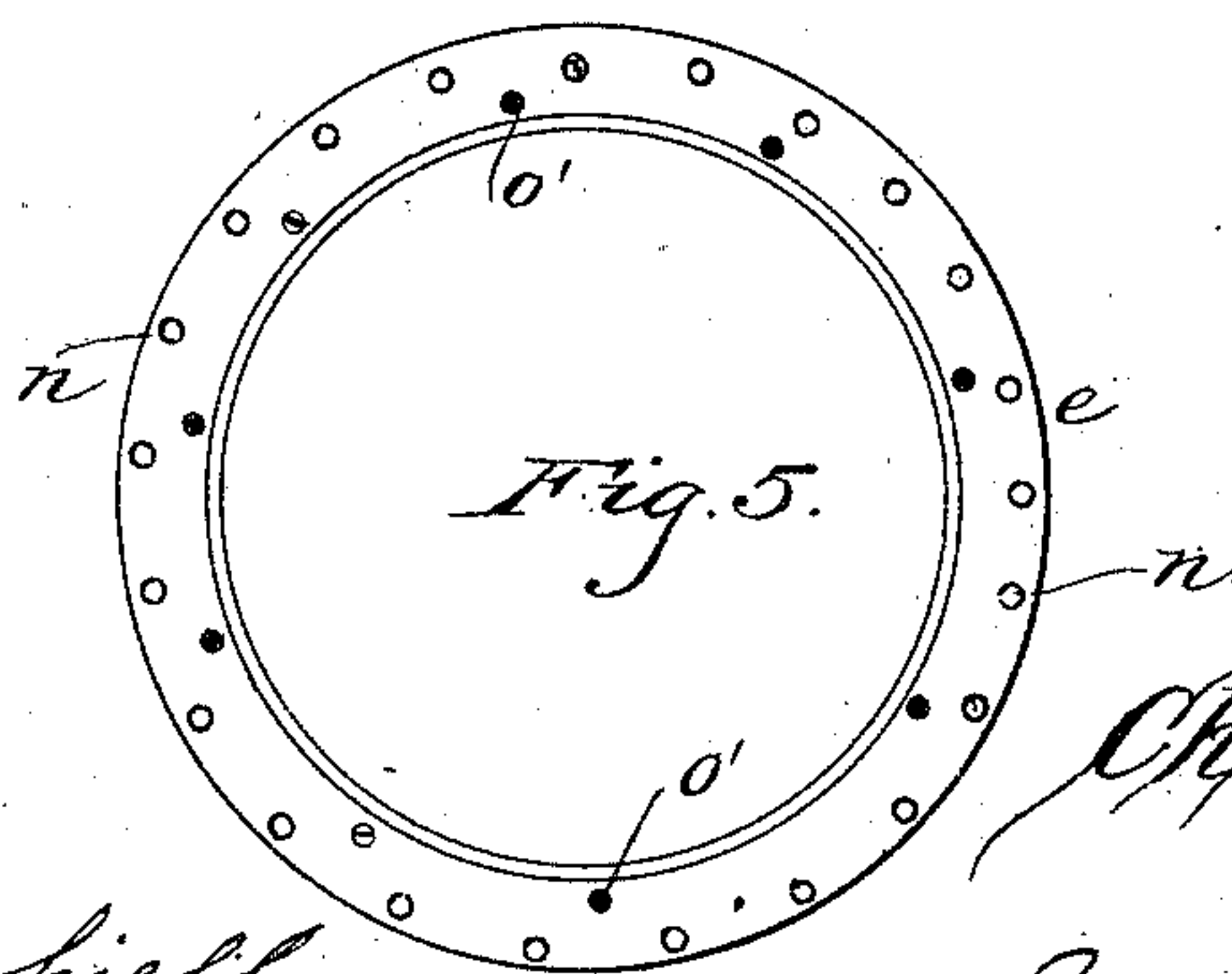
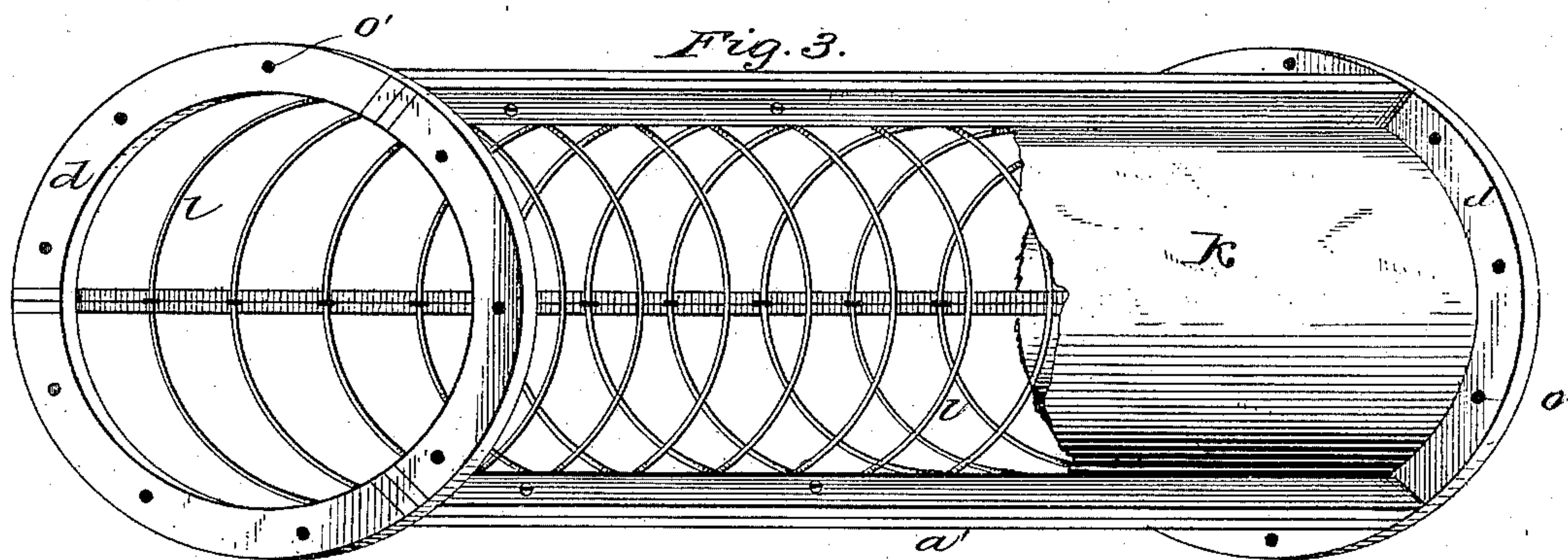
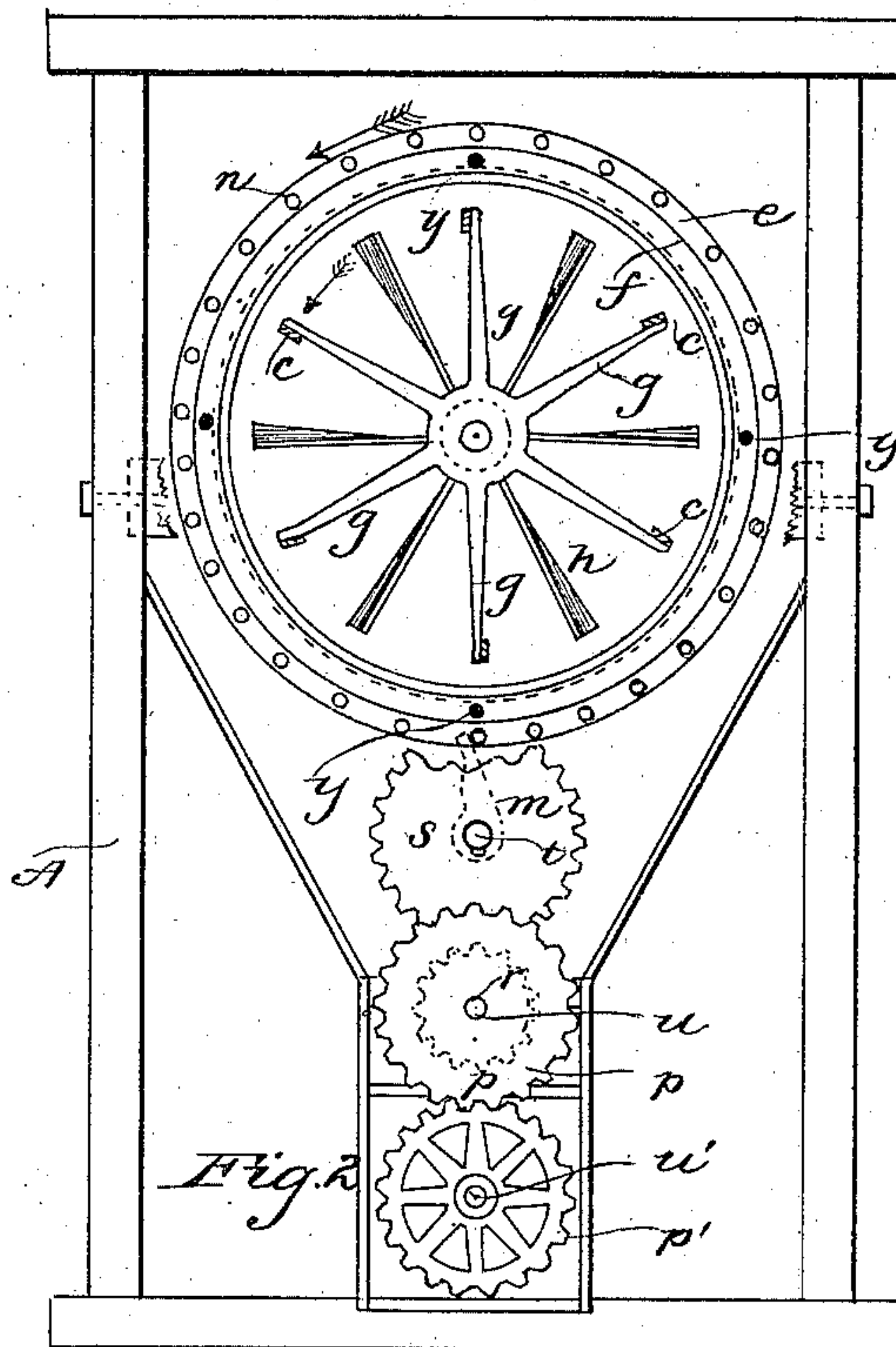
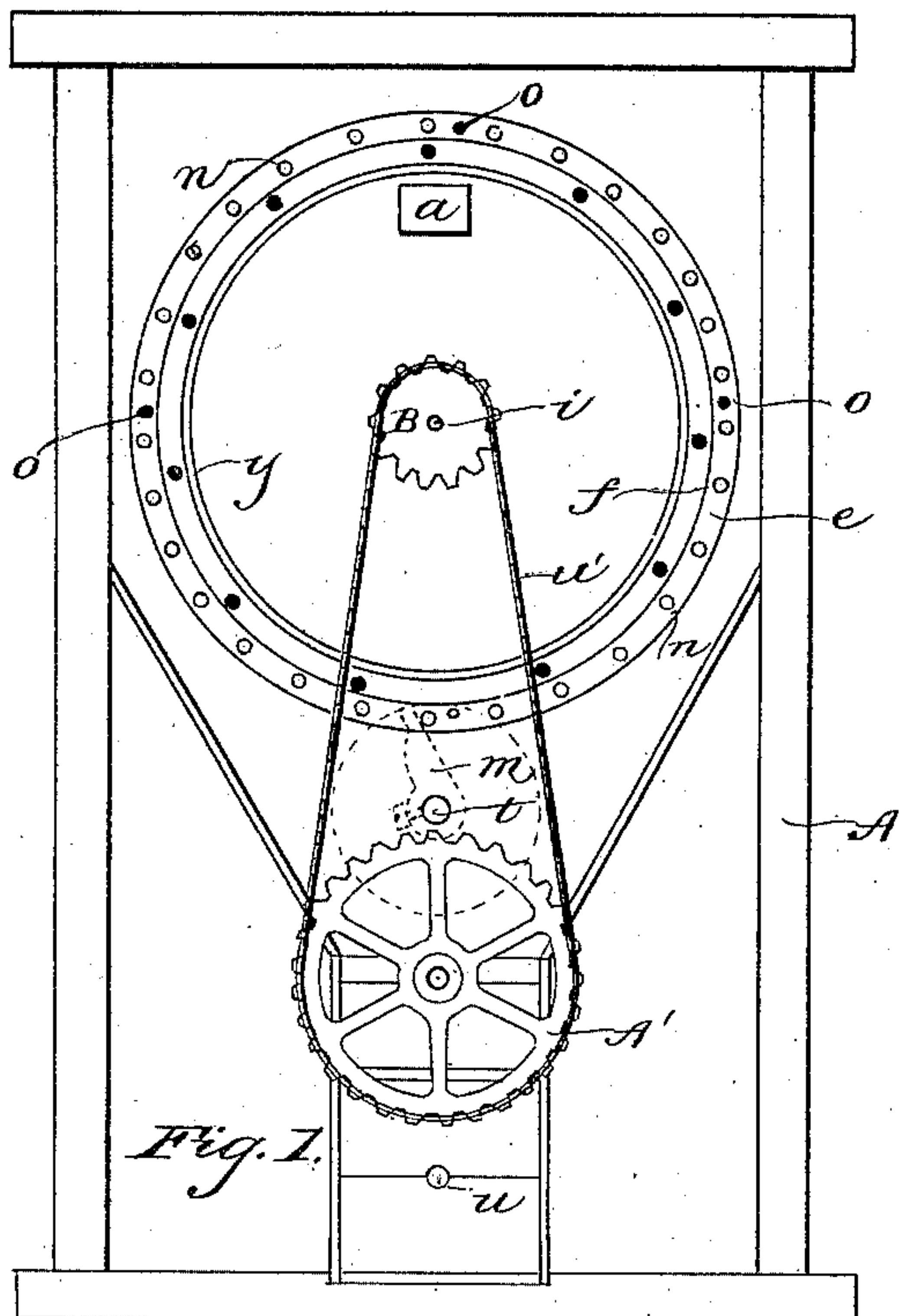
(No Model.)

2 Sheets—Sheet 1.

C. E. MOYER.  
CENTRIFUGAL FLOUR BOLT.

No. 313,756.

Patented Mar. 10, 1885.



WITNESSES

*C. W. Nash*  
*E. J. Siggers*

*Chas. E. Moyer*  
INVENTOR

*By C. A. Snow & Co*  
Attorney

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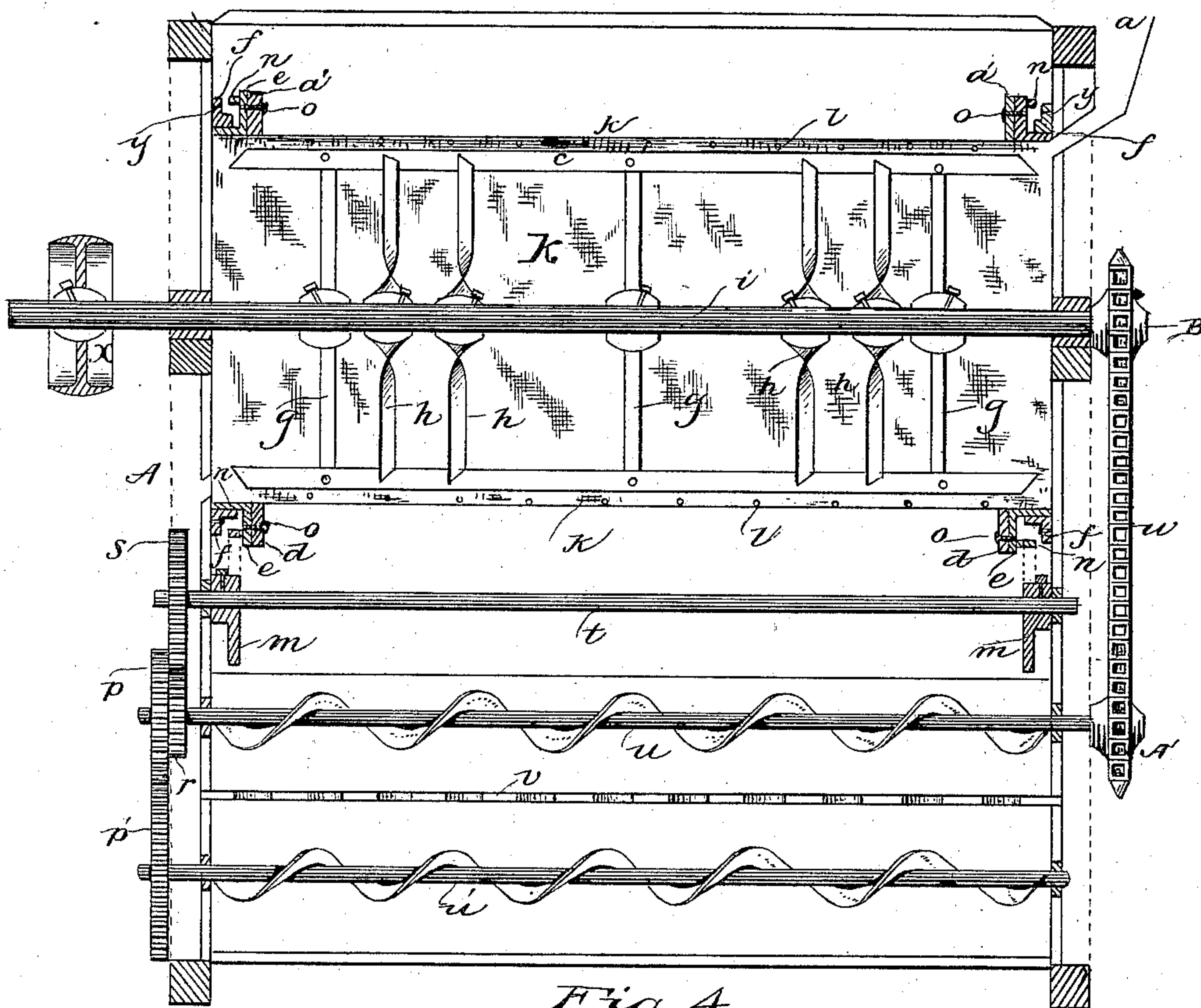


Fig. 4.

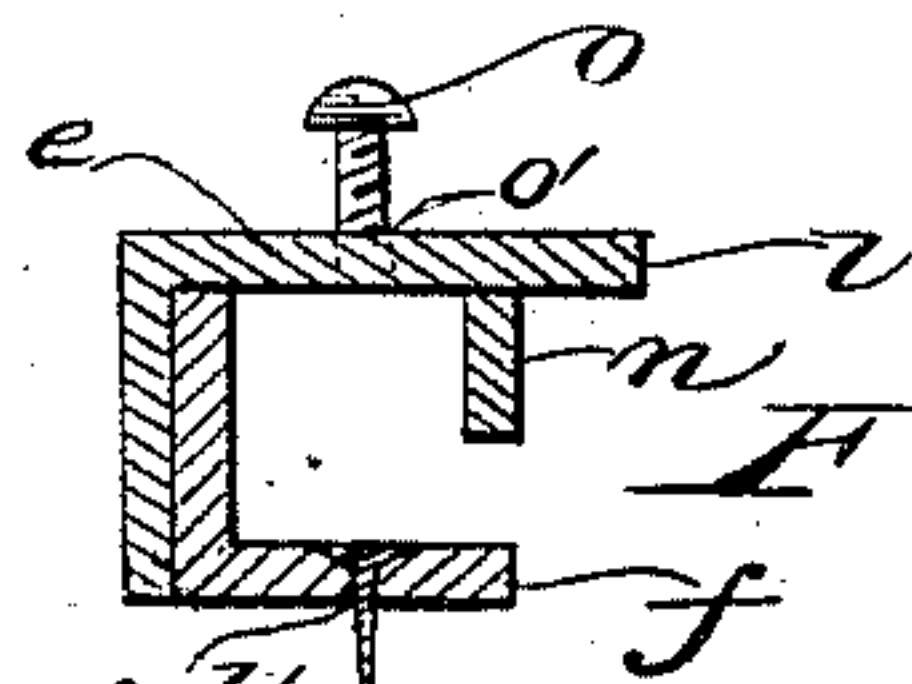
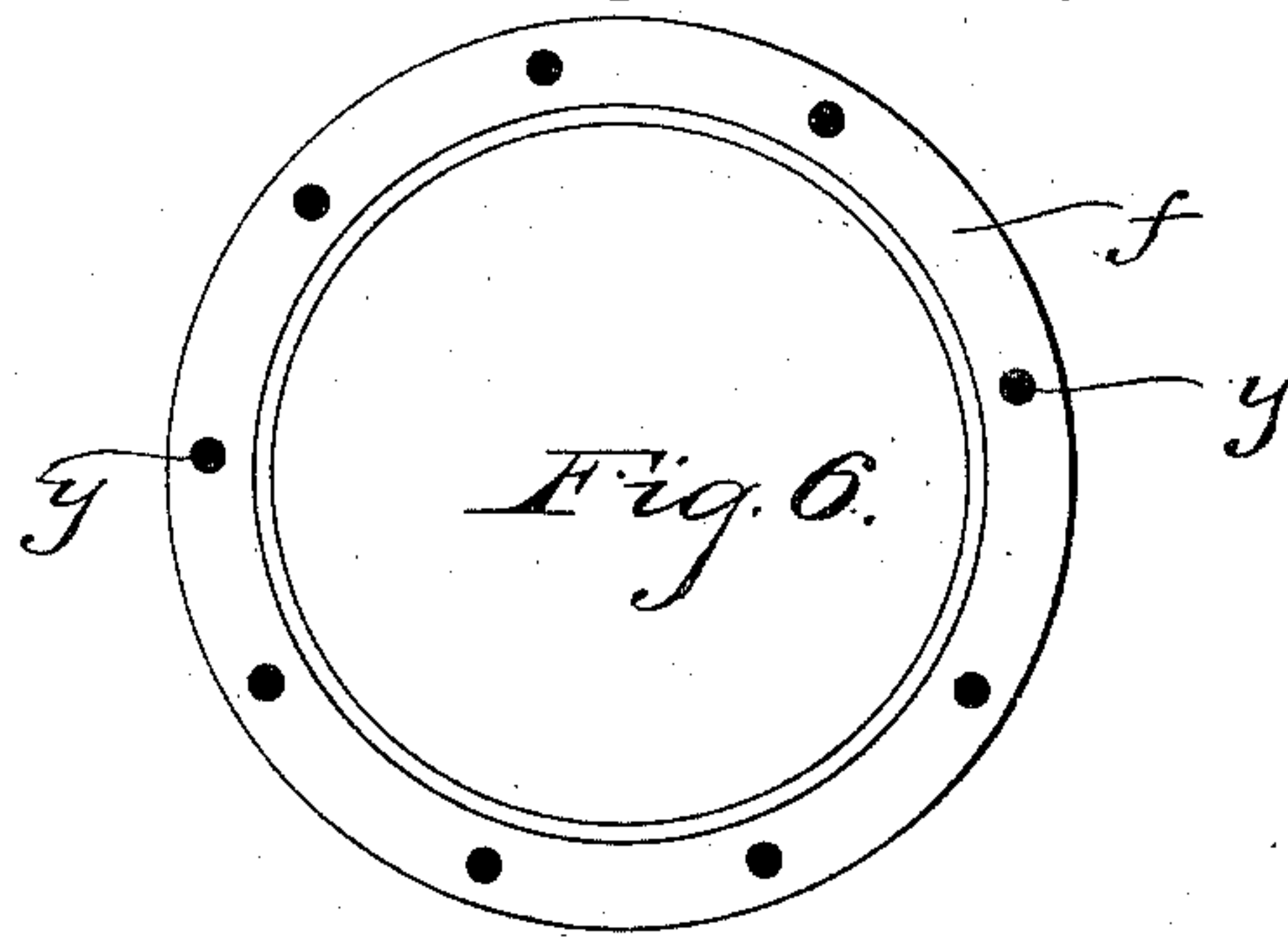


Fig. 7. Chas. E. Moyer.  
INVENTOR

WITNESSES

*C. W. Nash*  
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Attorney



# UNITED STATES PATENT OFFICE.

CHARLES EDWARD MOYER, OF STEVENS POINT, WISCONSIN.

## CENTRIFUGAL FLOUR-BOLT.

SPECIFICATION forming part of Letters Patent No. 313,756, dated March 10, 1885.

Application filed November 11, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. MOYER, a citizen of the United States, residing at Stevens Point, in the county of Portage and State of Wisconsin, have invented a new and useful Improvement in Centrifugal Flour-Bolts, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to centrifugal flour-bolts; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of the feed end of a centrifugal flour-bolt embodying my improvements. Fig. 2 is an elevation of the discharge end of the same. Fig. 3 is a view in perspective of the silk frame of the bolting-cylinder with the silk broken away. Fig. 4 is a longitudinal vertical section of the bolting sheet and cylinder. Fig. 5 is an end view of one of the inner flanges at the ends of the bolting-cylinder. Fig. 6 is an end view of the outside flange, and Fig. 7 is a detail sectional view showing the connection of the inner and outer flanges.

Referring by letter to the accompanying drawings, A designates the frame of the machine, and *a* the feed-entrance to the flour-bolt.

*e* designates the inner flange, to which the silk frame *a'* is secured by machine-screws *o* through threaded holes *o'* in said frame.

*f* designates the outside flange, in which flange *e* revolves.

*n* designates lugs or pins on the flange *e*, against which cam *m*, mounted on revolving shaft *t* below the bolt, strikes, causing the rim or flange *e* to revolve within the flange *f* the distance between the lugs or pins *n*, after which the flange *e* remains stationary until cam *m* makes another revolution. *y* designates the screw-holes in flange *f* for the purpose of securing the flange *f* to the bolt-frame.

B is a chain-wheel, which is secured to one end of the shaft *i*.

*w* is a sprocket chain, and A' is a sprocket-wheel on the upper conveyer-shaft.

*g* designates the spiders, which are secured to the shaft *i*, and to these spiders the beaters

*c* are secured. The beaters and silk frame revolve in the direction of the arrows.

*h* designates deflectors that facilitate or retard the material in its passage from the head to the tail of the reel, and are operated to suit the workings of the bolt. These deflectors or arms *h* are made of wrought-iron, and may be twisted either way, so that they will, when revolving, throw the material either toward the head or tail of the bolt.

*s* designates a spur-wheel secured to shaft *t*, and *r* is a spur-wheel secured to the end of the conveyer-shaft *u*. The shaft *u* is also provided with a spur-wheel, *p*, which engages a spur-wheel, *p'*, on the lower conveyer-shaft, *u'*. *v* designates the cut-off between the conveyers.

*w* is a detachable link-chain connecting the sprocket-wheels on the shafts *i* and *u*, and *x* is a pulley on the shaft *i*.

To illustrate the advantages of this construction, it is only necessary to state that when a screen is revolving at the rate of two hundred or three hundred feet per minute it has a great tendency to cut off the outward passage of the material when thrown against it, whereas I allow the silk to remain stationary a greater part of the time, and by so doing overcome this defect. This flour-bolt does not suck air, because it is fed outside of the circle of the inner diameter of the beaters. The discharge is also outside of the inner diameter of the radius of the beaters. Furthermore, the silk is drawn over the wires *l* and allows the beaters to pass close to the silk cloth.

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

1. The combination, with the frame provided with the outside flanges, *ff*, of the silk-covered reel-frame having flanges *ee*, the pins *n*, the cam *m*, and mechanism, substantially as described, for operating the cam, as set forth.

2. The combination, with the frame provided with the flanges *ff*, of the silk-covered reel-frame having flanges *ee*, the revolving beaters, the deflectors *h*, the cam *m*, pins *n*, and gearing, substantially as described, for operating the parts, as set forth.

3. The combination, with the frame having the flanges *ff*, of the silk-covered reel-frame, the revolving beaters and deflectors, and the feed and discharge openings located outside of  
5 the circle of the inner diameter of the beaters, substantially as set forth.

4. The combination, with the frame having flanges *ff* and the silk-covered reel with flanges *ee*, of the revolving beaters and de-  
10 flectors, the cam *m*, the conveyers *u u'*, and

gearing, substantially as described, for operating the reel, beaters, and deflectors, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 15 presence of two witnesses.

CHARLES EDWARD MOYER.

Witnesses:

S. B. COLEMAN,  
W. A. ROE.