No. 820,354.

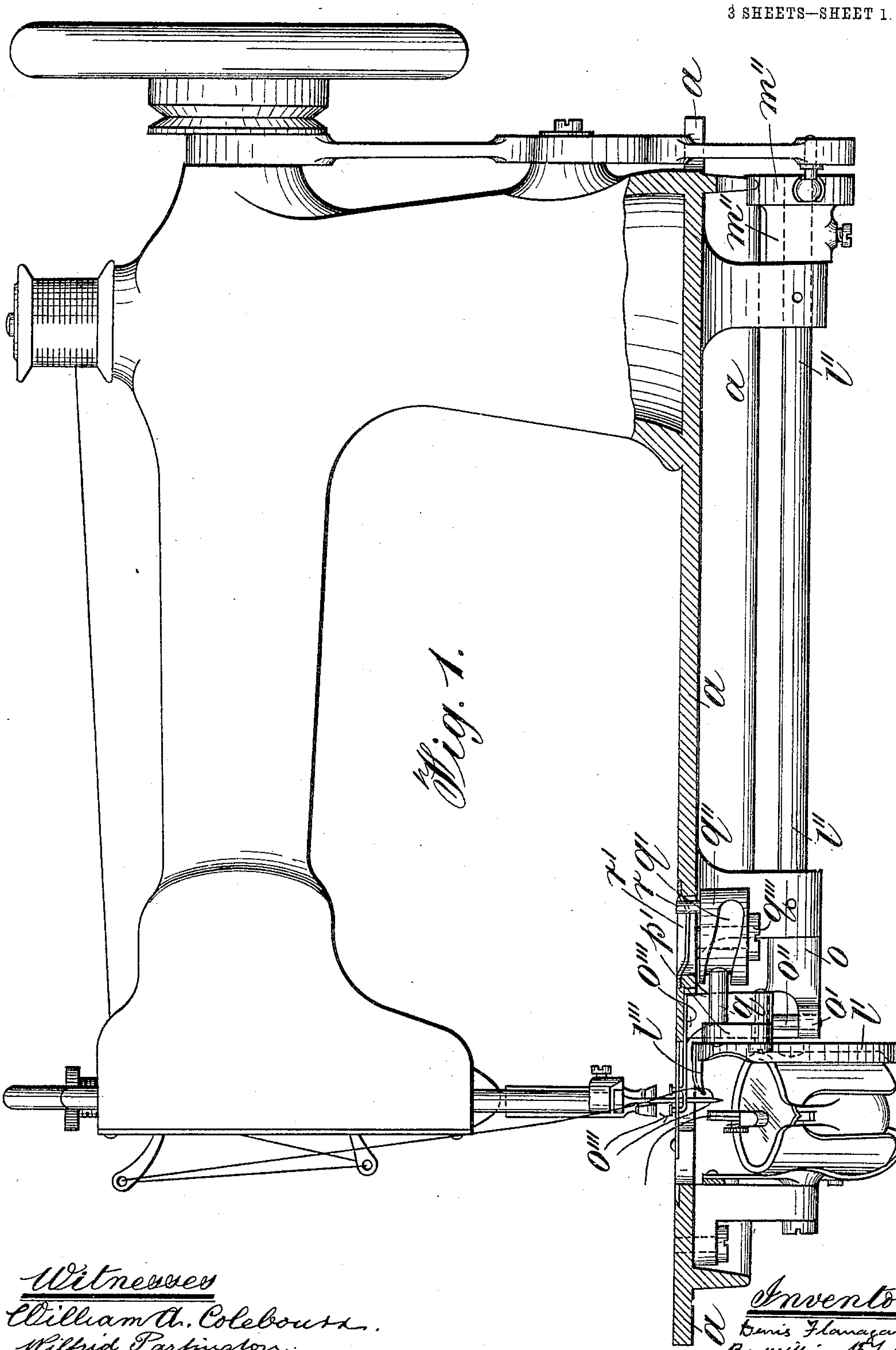
PATENTED MAY 8, 1906.

D. FLANAGAN.

CLOTH FEEDING MECHANISM FOR SEWING MACHINES.

APPLICATION FILED JUNE 17, 1905.

3 SHEETS—SHEET 1.



Witnesses

William A. Colebourne.

Wilfrid Partington.

Inventor.

Denis Flanagan

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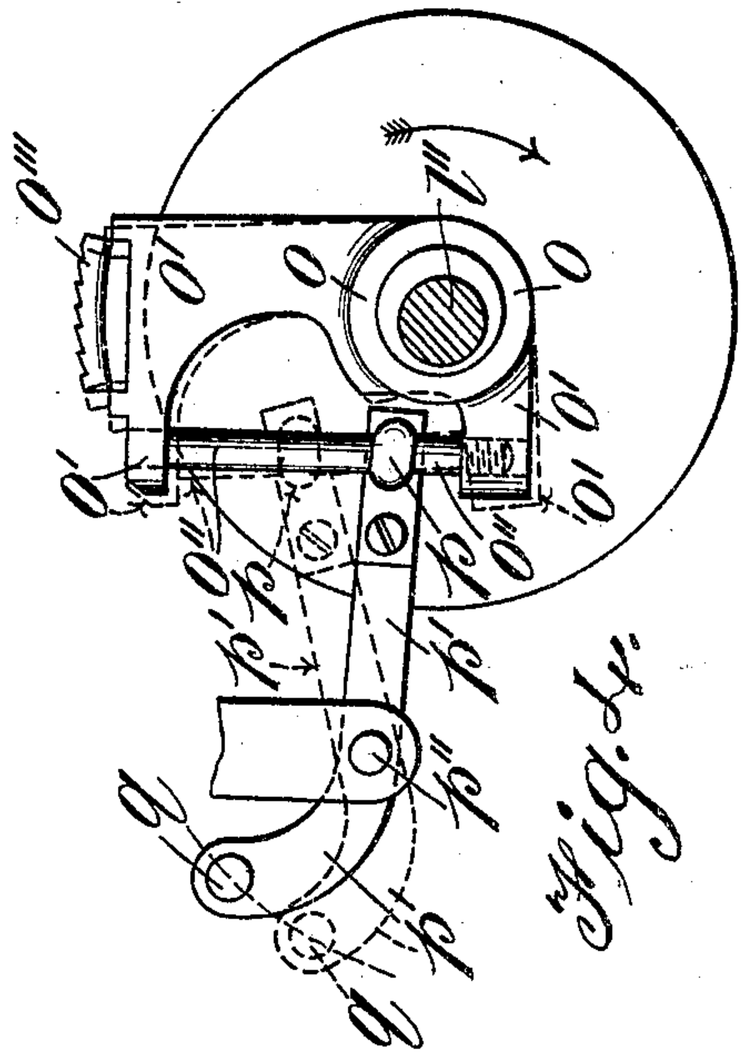

Fig. 4.

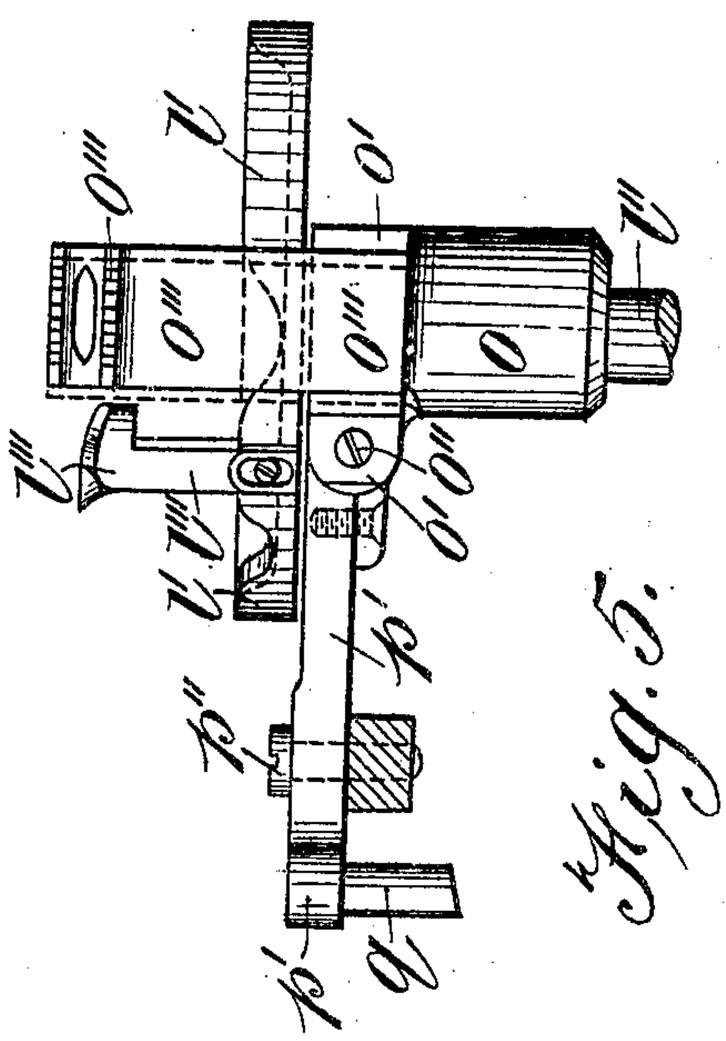

Fig. 5.

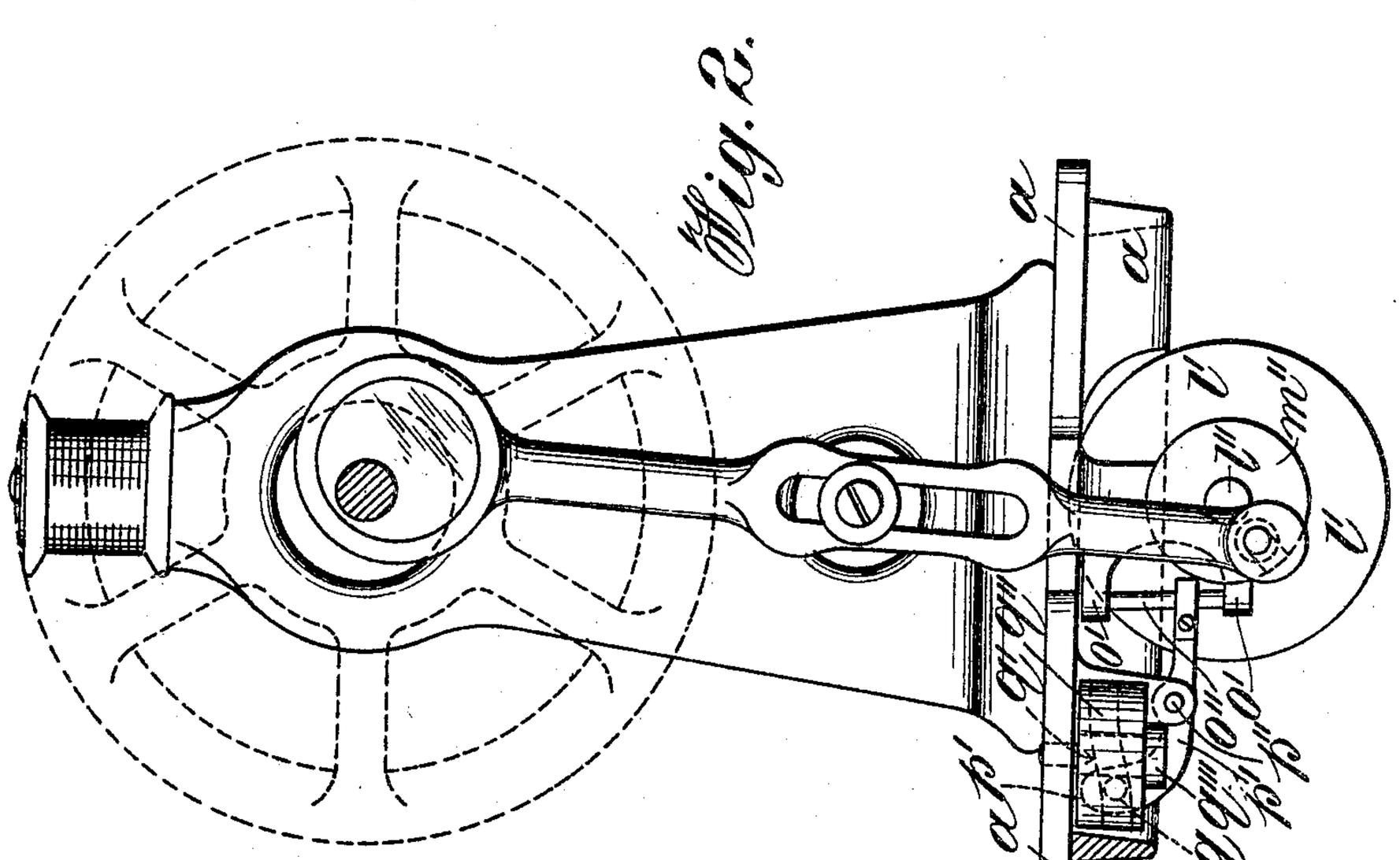

Fig. 2.

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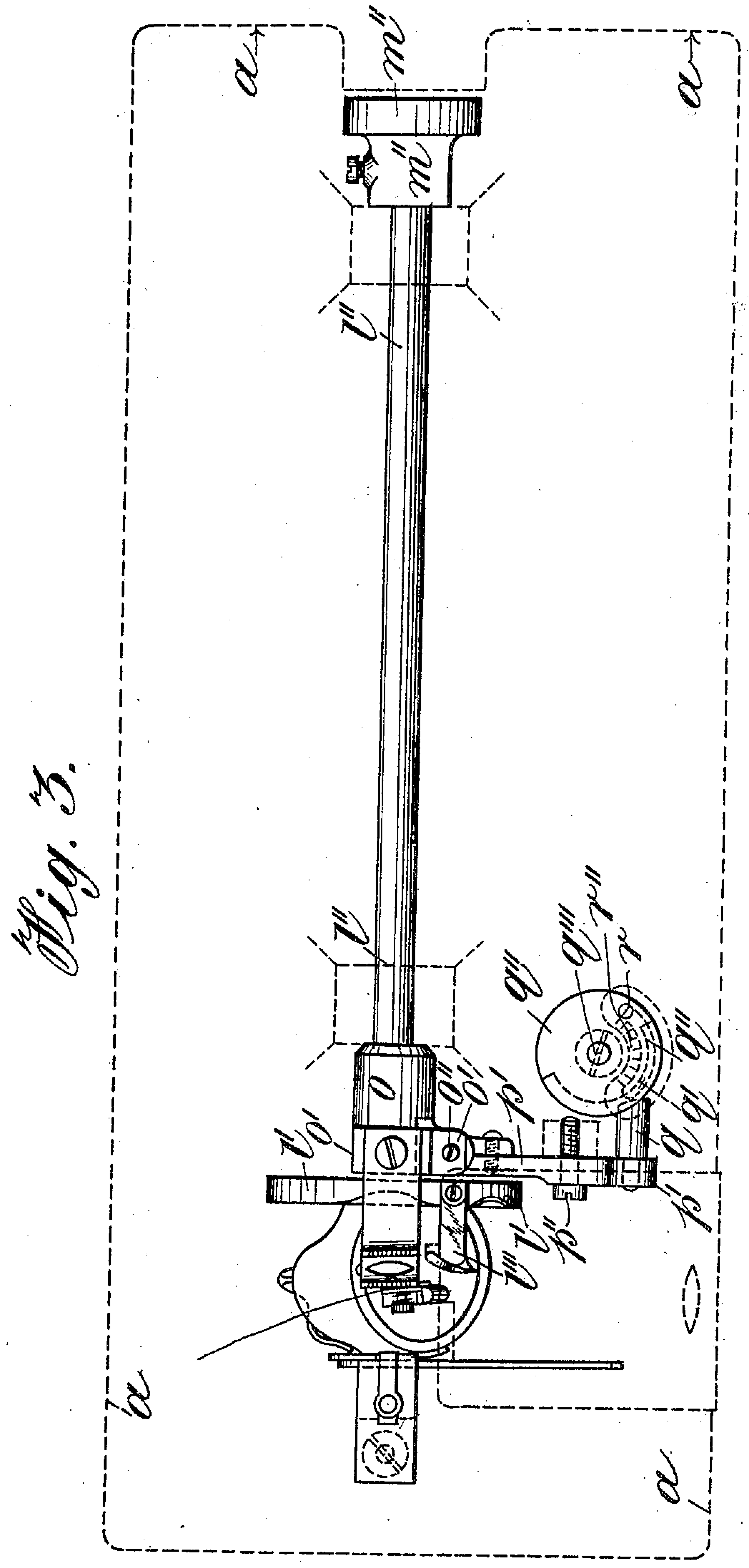
3 SHEETS—SHEET 3.



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Wilfrid Partington.

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UNITED STATES PATENT OFFICE.

DENIS FLANAGAN, OF CLAYTON-LE-MOORS, ENGLAND.

CLOTH-FEEDING MECHANISM FOR SEWING-MACHINES.

No. 820,354. Specification of Letters Patent. Patented May 8, 1906.

Original application filed May 20, 1904, Serial No. 208,987. Divided and this application filed June 17, 1905. Serial No. 265,676.

To all whom it may concern:

Be it known that I, DENIS FLANAGAN, works manager, a subject of the King of Great Britain and Ireland, and a resident of Clayton-le-Moors, in the county of Lancaster, England, (whose post-office address is 26 Oswald street, Clayton-le-Moors,) have invented certain new and useful Improvements in Cloth-Feeding Mechanism for Sewing-Machines, of which the following is a specification.

This invention relates principally to improvements in two-reel sewing-machines, and particularly to an improved cloth-feeding mechanism and to means for indicating the number of stitches per inch being put into the cloth.

Figure 1 is a longitudinal section of the machine, showing principally the feeding mechanism. Fig. 2 shows an elevation, partly in section, from the driving end of the machine. Fig. 3 is a plan of the under mechanism of the machine, showing principally the reel-case, looping device, and feeder-motion. Fig. 4 is an elevation, partly in section, from the right-hand end of Fig. 1; Fig. 5, plan of same.

Referring to improvements in the mechanism for feeding the fabric forward beneath the needle, which is clearly indicated in Figs. 1 to 5, the boss of the disk l', carrying the looper l''', is turned eccentric. On the eccentric is mounted a sleeve o, having projecting from it two arms o', designed to receive a shaft o'', which is securely mounted in them, one of said arms having fixed to it the serrated feeder-plate o''', which passes through the usual slots formed in the cloth-plate beneath the needle-bar. The shaft has loosely mounted on it a small ball p, capable of moving longitudinally of the shaft, and in conjunction with the ball is employed a lever p', pivoted at p'' to the under side of the bed-plate a and provided at its inner end with a spherical bearing adapted to embrace the ball. The opposite end of the pivoted lever is provided with a steel pin q, which may or may not have mounted on it an antifriction-roller. The pin or the roller engages with a cam-groove q', cut in a disk q'', loosely mounted on a pin at the under side of the bed-plate a. The disk is capable of being moved round its pin q''', so as to vary the position of the pivoted lever, as indicated by broken lines in Fig. 4, and consequently to move the slidable ball nearer to or farther from the center of the shaft l'', so that the traverse of the feeder-plate o''' can be altered as designed in accordance with the number of stitches per inch required to be put into the cloth. The disk is preferably moved to effect this by means of a small pin r or lever projecting toward the top side of the bed-plate of the machine and preferably through a slot r', Fig. 1. The pin or lever can be readily moved to a suitable position, and by the employment of a graduated scale r'' at the edges of the slot or by the use of a separate graduated plate the number of stitches per inch to be put in the fabric, corresponding with the position of the pin, can be seen at a glance. The feeder-shaft l'' is operated by a crank-disk m'' from the usual top shaft of the machine.

In conclusion, I would have it understood that the feeder-plate mechanism may be employed in sewing-machines in which a shuttle is used for the bottom or under thread.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a cloth-feeding device for two-reel or other sewing-machines having a rotatable shaft, an eccentric mounted on the shaft, an eccentric-ring on the eccentric, arms carried by the eccentric-ring, a pin mounted between the arms, a lever having slidable connection with the pin, whereby movement of the arms is limited, means for adjusting the lever, and a feed member carried by one of the arms.

2. In a feeding device for sewing-machines, a shaft, an eccentric thereon, an eccentric-ring on the eccentric, arms projecting from the eccentric-ring, a pin carried between the arms, a lever slidably connected to the pin, a pin carried by the lever, a disk having a cam-slot in which the pin is situated, to adjust the lever, and a feed member carried by one of the arms.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

DENIS FLANAGAN.

Witnesses:
WILLIAM W. TAYLOR,
MABEL LEE.