

No. 820,355.

PATENTED MAY 8, 1906.

D. FLANAGAN.  
SEWING MACHINE REEL CASE.

APPLICATION FILED JUNE 17, 1905.

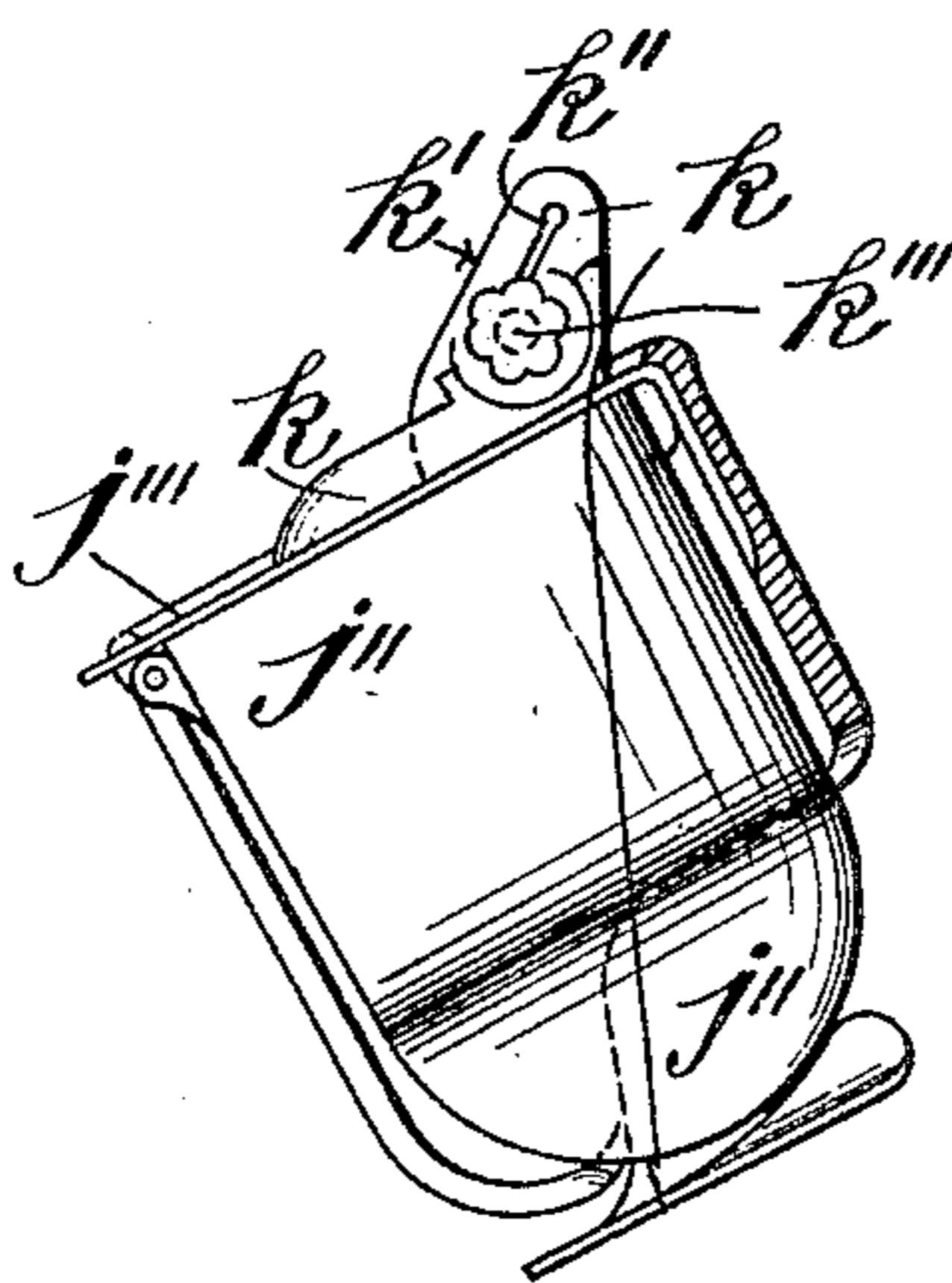


Fig. 5.

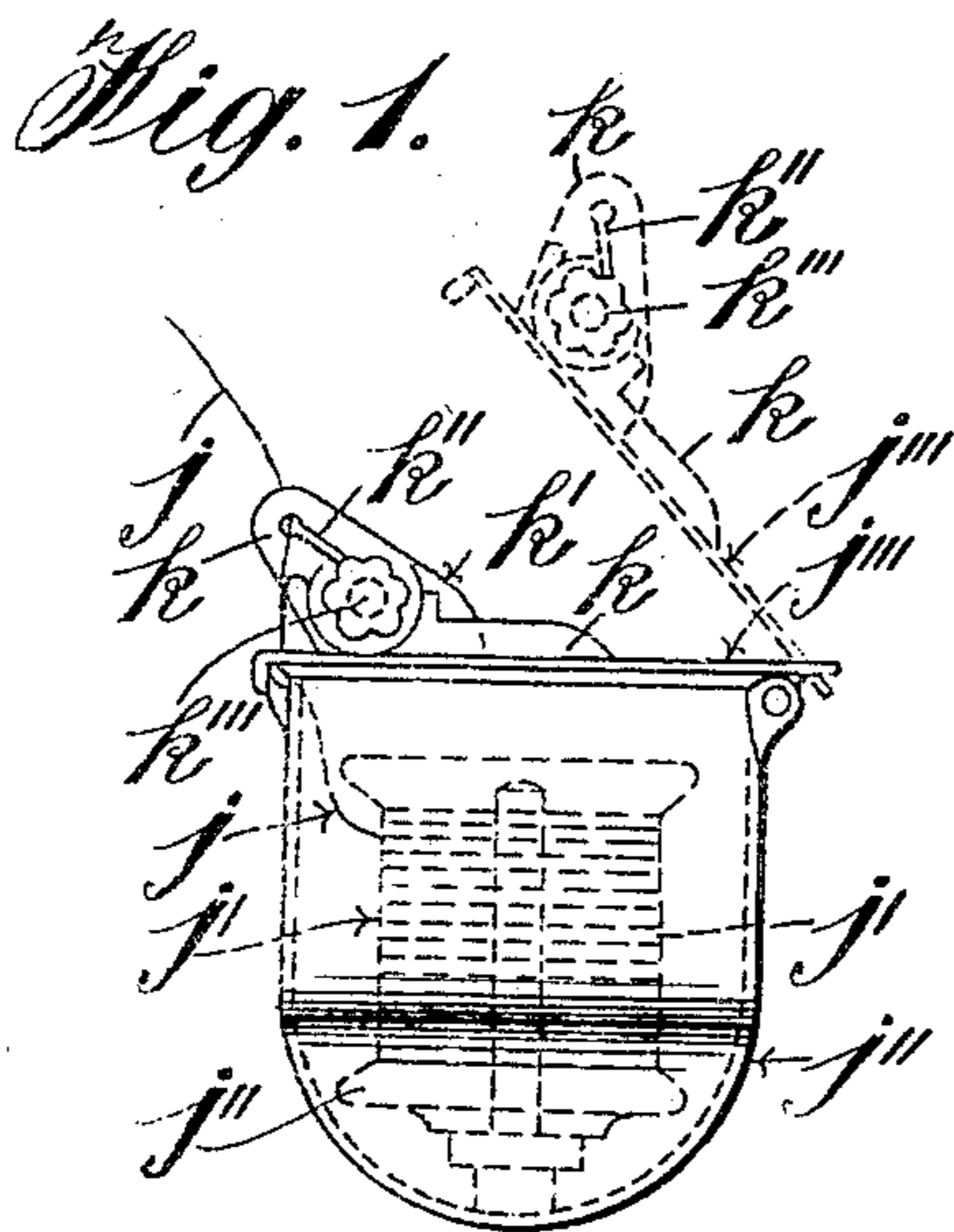


Fig. 1.

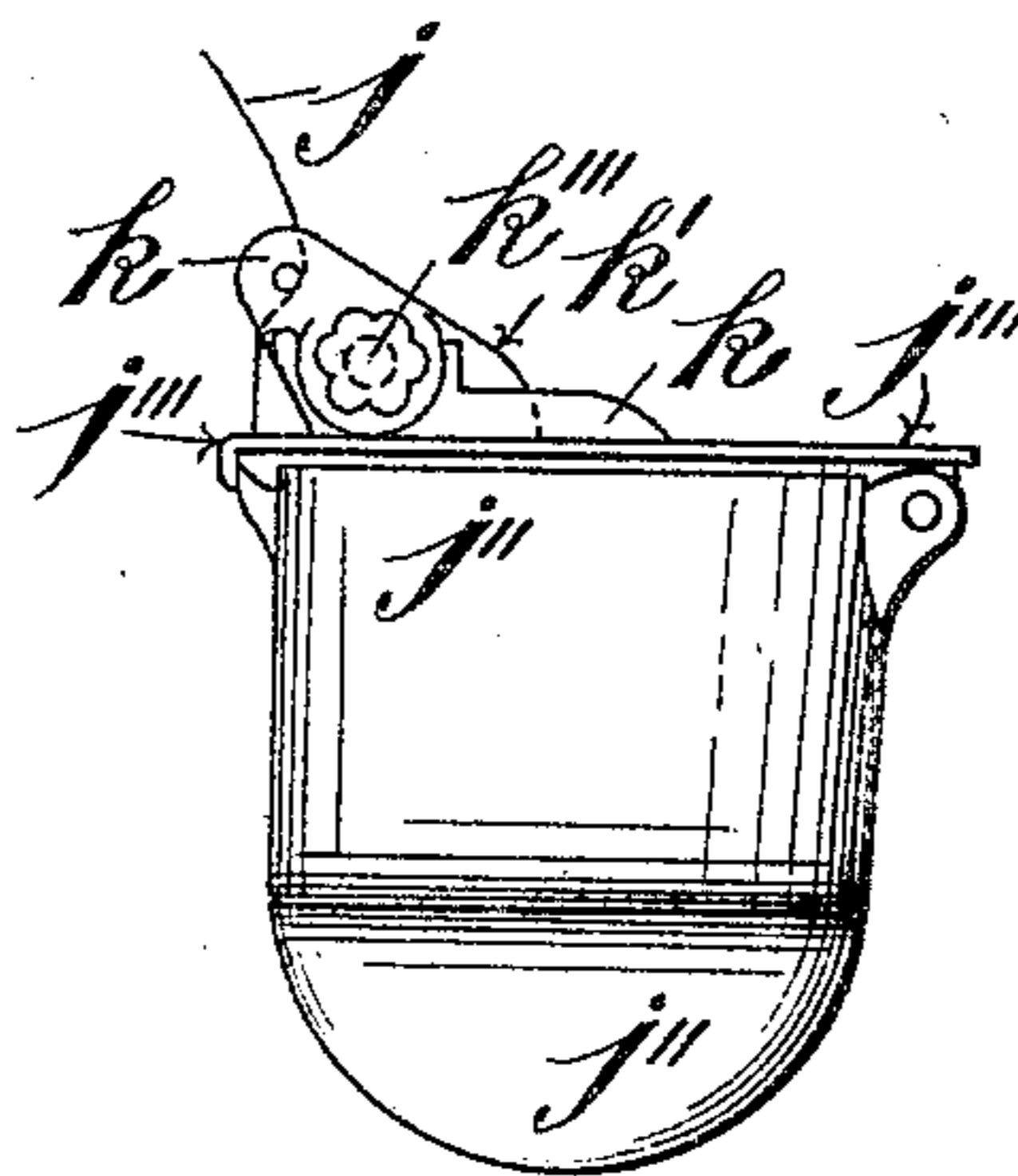


Fig. 2.

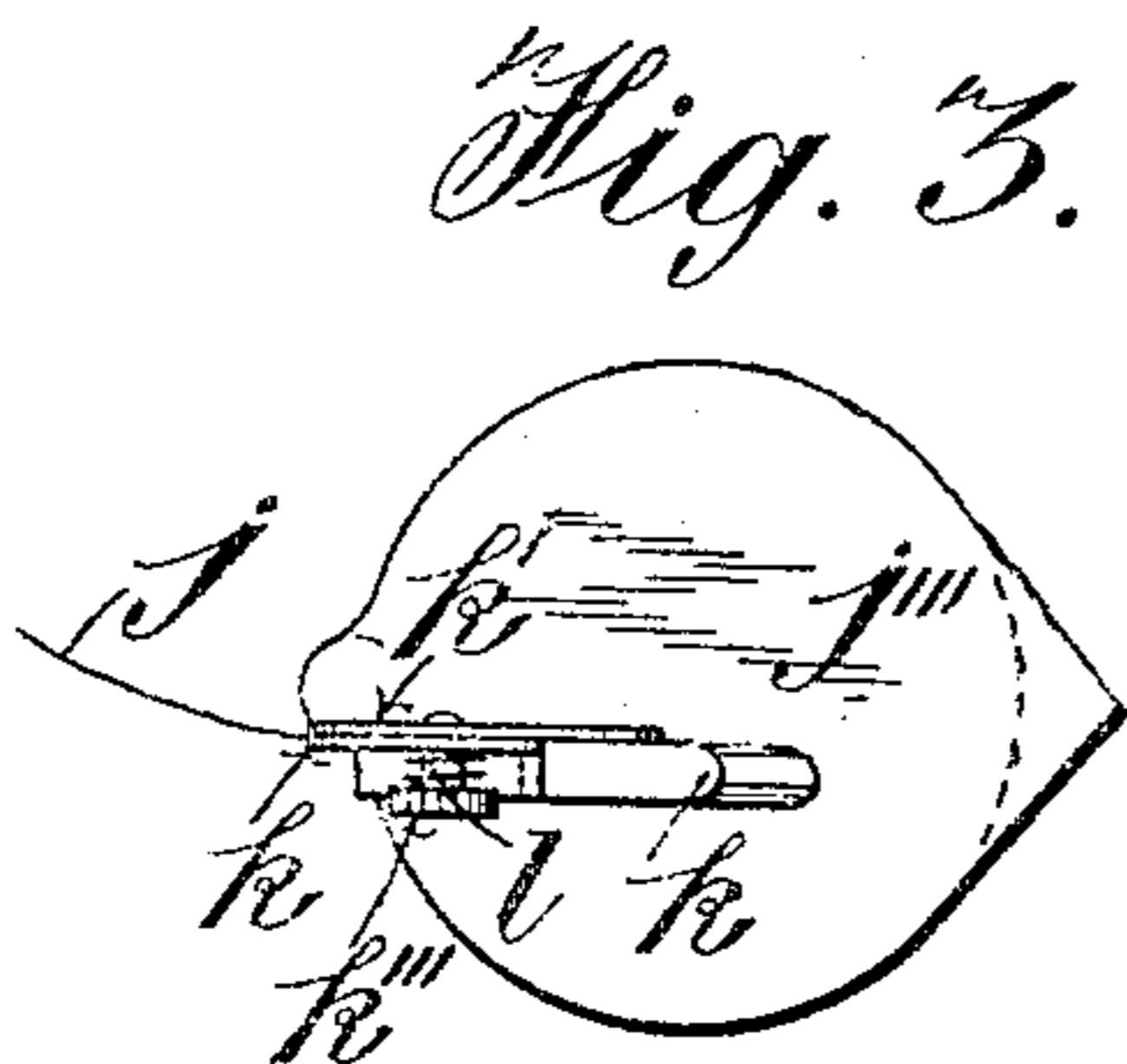


Fig. 3.

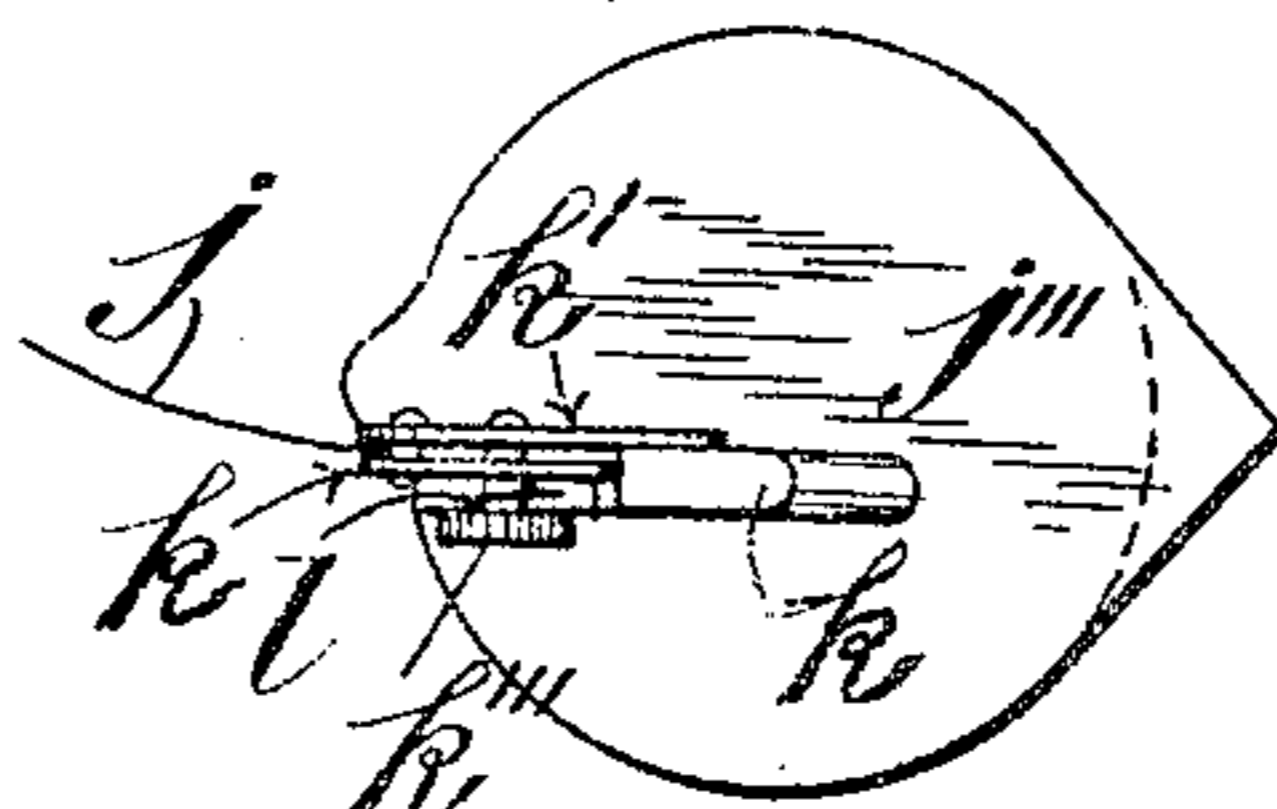


Fig. 4.

Witnesses.  
William A. Colebourne.  
Wilfrid Partington.

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# UNITED STATES PATENT OFFICE.

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

## SEWING-MACHINE REEL-CASE.

No. 820,355.

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. 265,678.

*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 Two-Reel Sewing-Machines, of which the following is a specification.

This invention relates principally to improvements in two-reel sewing-machines, and particularly to improvements in the reel-case and an improved tension arrangement for the under thread in connection with the latter.

Figure 1 indicates an end elevation of the reel-case with under-thread bobbin inclosed and showing the cover of the case in the open and closed positions; Fig. 2, a similar view showing closed position of the reel-case cap and indicating a slightly-modified arrangement of the under-thread tension device; Fig. 3, a plan of Fig. 1, and Fig. 4 a plan of Fig. 2. Fig. 5 is a vertical section of the reel-case holder, showing position of the reel-case within the holder.

The main body of the reel-case, as will be seen from the drawings, consists of a tubular shell  $j''$ , the lower portion of which is rounded or made semispherical in order to enable the needle-thread in the form of a loop to be readily passed round it in forming the stitch with the least amount of friction. The spherical base also enables the reel-case to be easily tilted in its holding-case as the needle-thread is passing from beneath it to the rear side and as the thread is being drawn up by the take-up devices to tighten the stitch. The reel-case is provided at the top with a cover  $j'''$ , pivoted or hinged at the rear side to the case and provided at the front side with a pointed or doubly-inclined nose, as will be seen in Figs. 3 and 4, adapted to lie in a vertical slot in the reel-case holder, so as to assist in opening out the needle-thread loop to enable the latter to be carried round the

exterior of the reel-case in the formation of the stitch. The hinged cover also enables the reel  $j'$  to be placed in position in the case or to be removed therefrom.

Referring to the means for controlling the tension of the under thread  $j$ , carried by a bobbin  $j'$ , mounted on a spindle in the reel-case  $j''$ , as seen clearly in Figs. 1 to 4, I provide the latter with a hinged cover  $j'''$  for holding the reel in position. The tension devices form part of or are attached to the hinged cover and consist of an upstanding lug  $k$  and a movable plate  $k'$ , provided with a slot  $k''$ , open at one end to enable the thread to be passed beneath the hinged cover and the body of the reel-case, through the slit, and thence between the lug and plate. The latter is controlled in its movement toward or from the stationary lug by a screw  $k'''$ , on which is a spring  $l$ , so that greater or less pressure can be brought to bear on the latter by the screw to force the plate in the direction of the lug, and thereby regulate the tension. The screw can be readily operated by the fingers of the operator. The upstanding lug and plate project higher than the needle-eye when the latter is in the lowest position, and so protect the under thread from being caught by the rotating loop-carrier as it passes it.

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

In combination with a reel-case, a cover therefor, a lug on the cover, a plate having an opening therethrough, a screw passing through the lug and engaging the plate, and a spring embracing the screw and bearing against the lug and the head of the screw, whereby the tension of the plate is regulated.

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

DENIS FLANAGAN.

Witnesses:

WILLIAM W. TAYLOR,  
MABEL LEE.