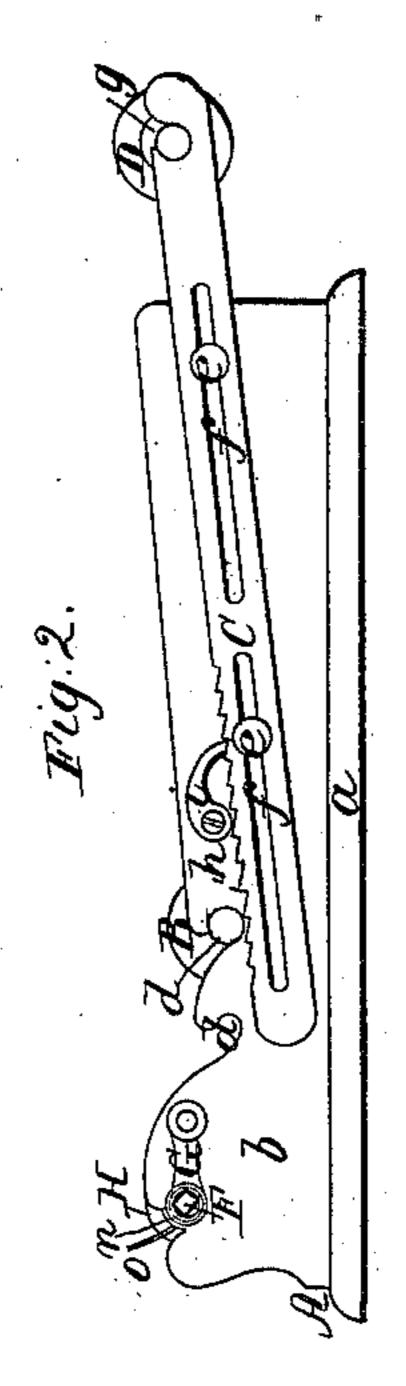
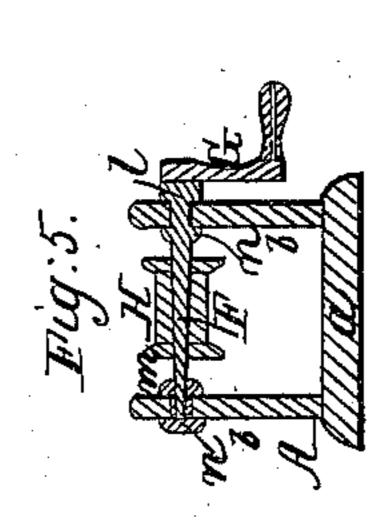
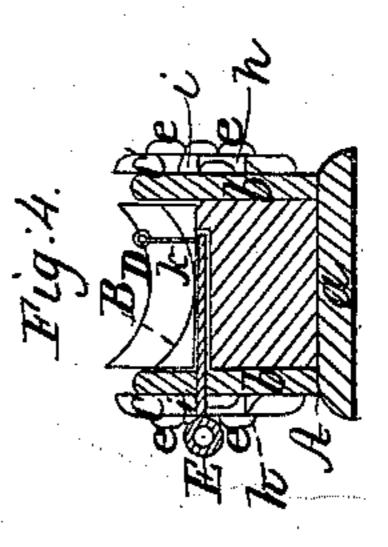
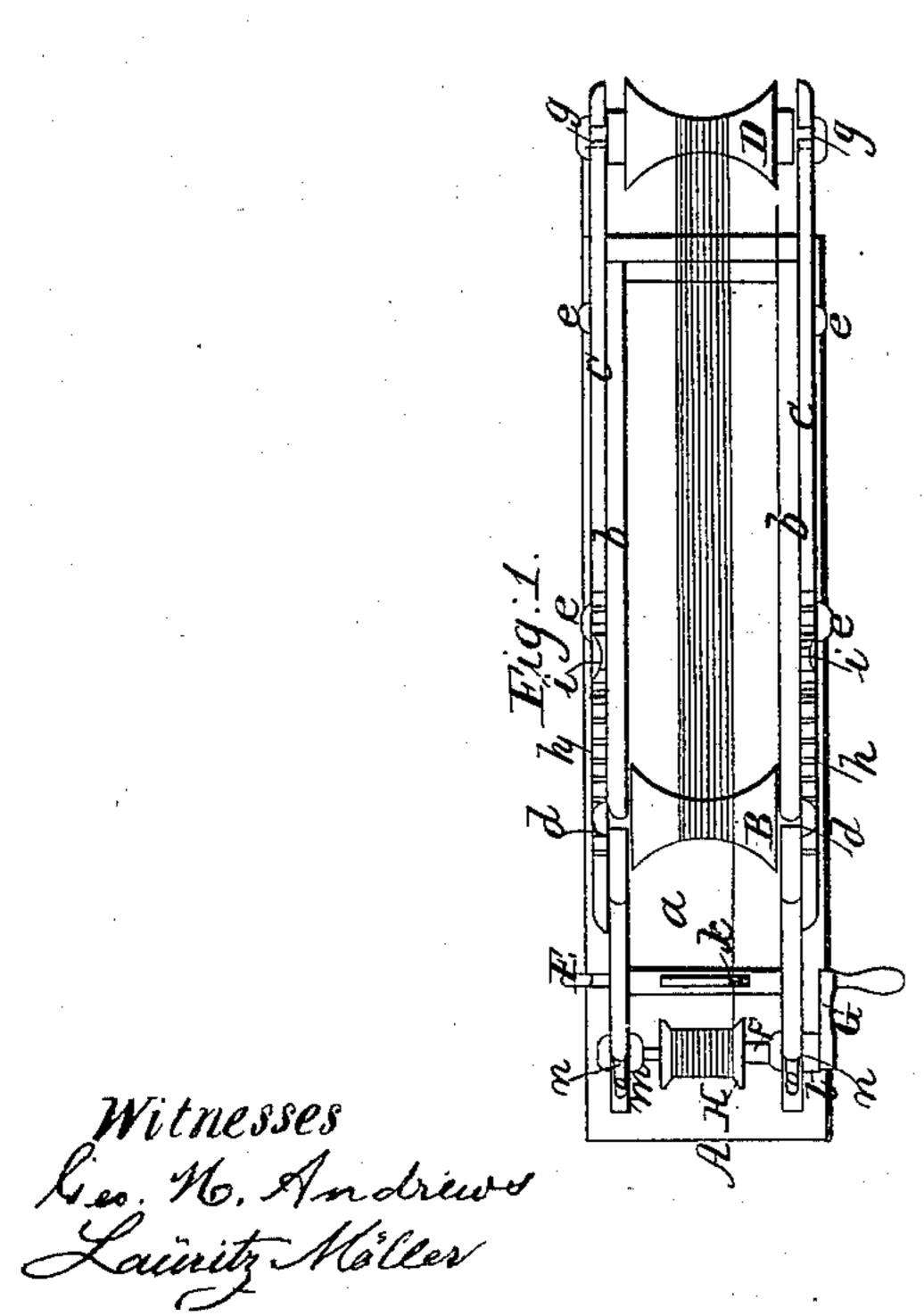
A. S. Phillips. Sprooling Thread. Patented Oct. 22,1867.

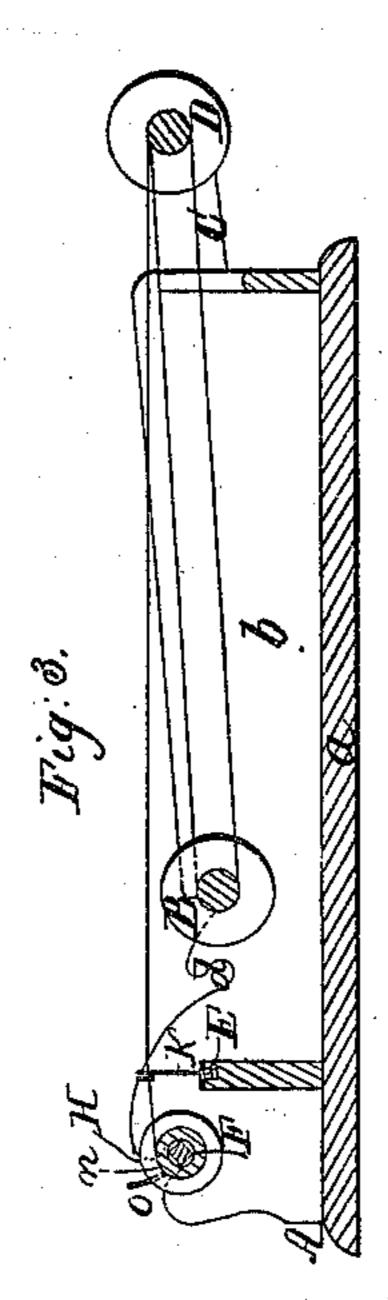
N° 70,113.











Inventor

Alfred S Phillips

by his attorney

P. Medery

Anited States Patent Pffice.

ALFRED S. PHILLIPS, OF SOUTH BOSTON, MASSACHUSETTS.

Letters Patent No. 70,113, dated October 22, 1867.

IMPROVEMENT IN APPARATUS FOR SPOOLING THREAD.

The Schedule referred to in these Vetters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, Alfred S. Phillips, of South Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful or improved Apparatus for Balling or Spooling Thread from a skein; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view,

Figure 2 a side elevation, and

Figure 3 a longitudinal section of it.

Figure 4 is a transverse section of it, such being taken through its movable thread-guide.

Figure 5 is another transverse section of it, such being taken through the axis of its spool.

In such drawings, A denotes the frame of the machine, as mainly composed of a base-plate, a, and two parallel standards or plates b, the latter being erected on the base-plate. Each of these plates b is notched, as shown at d d, for the reception of the journals of a roller, B, arranged in one pair of the notches, as represented. To the outer side of each plate b a bar, C, is applied, by means of pins or bolts e e going through slots f f made in the bar, such pins being projected from the plate b. Near its outer end each of such bars C C is notched, as shown at g, so as to receive one of the journals of another roller, D, arranged between the bars in manner as shown in figs. 1 and 2. Each of the bars C has a series of notches or teeth, as shown at h, they being to operate with a retaining-pawl, i, placed over the bar and against the next adjacent plate b.

A skein of thread or yarn being placed on and around the two rollers, the two bars C C are to be drawn outward until such skein may be tight upon the rollers, the pawls i, by dropping into the notches or against the

teeth, serving, with such, to keep the bars extended or in place.

In rear of the first-mentioned roller is a slider, E, carrying a guide, k, such slider being supported so as to enable it to be moved both back and forth transversely of the frame. In rear of the slider is a tapering shaft, F, provided with a crank, G. This shaft has one fixed journal l, and one movable journal m, the latter being so made and applied to the shaft as to be capable of being removed from it to enable a spool, H, to be placed on the shaft, by forcing the latter through the spool axially. The two journals of the shaft are supported in notches n n made in the plates b b, and are kept in place by means of springs o o applied to such notches, or arranged with respect to them in manner as represented in the drawings.

When the apparatus is to be used, the end of the thread from the skein should be passed through the guide of the slider, and carried to the cranked shaft, or to a spool when thereon. By revolving the shaft with one hand applied to its crank, and by moving the slider with the other hand, as occasion may require, a person may

readily reduce the skein to a ball or wind it upon the spool.

The apparatus, so made, takes up less room than the common "swift," when expanded, and, besides, is far more convenient for use.

I claim as my invention—

The arrangement, as well as the combination, of the two rollers B D, the frame A, the adjustable bars C C, provided with notches or teeth h and pawls i, as described, the slider E and its guide k, and the cranked shaft F, the whole being substantially as specified.

I also claim the combination of the movable journal m with the cranked shaft F and its stationary journal l, as set forth

ALFRED S. PHILLIPS.

Witnesses:

R. H. Eddy,

F. P. HALE, Jr.