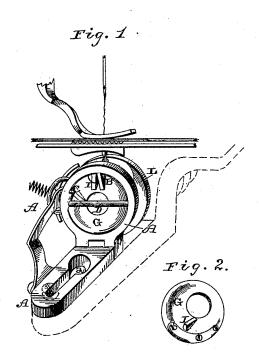
(Model.)

## A. MILLER. REVOLVING HOOK MACHINE.

No. 419,863.

Patented Jan. 21, 1890.



Witnesses: E. Ellis, M. L. Bassett. Inventor: Onthoney Mpiller! Jew J. A. Lehmann!, Otty.

## UNITED STATES PATENT OFFICE.

## ANTHONEY MILLER, OF HUNTINGBURG, INDIANA.

## REVOLVING-HOOK MACHINE.

SPECIFICATION forming part of Letters Patent No. 419,863, dated January 21, 1890.

Application filed February 6, 1889. Serial No. 298,812. (Model.)

To all whom it may concern:

Be it known that I, Anthoney MILLER, of Huntingburg, in the county of Dubois and State of Indiana, have invented certain new 5 and useful Improvements in Bobbin-Covers and Slide-Rings for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art 10 to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in bobbin-covers and slide-rings for sewing-ma-15 chines; and it consists in a slide-ring provided with a stop, and a projection upon the bobbin-cover for the purpose of limiting the amount of rotary movement the bobbin-cover shall have, as will be more fully described

20 hereinafter.

The object of my invention is to prevent the bobbin-cover from turning beyond a certain point and tangling the thread, and to enable the machine to be started with about 25 half an inch of thread instead of requiring two or three inches, as will be more fully described hereinafter.

In the accompanying drawings, Figure 1 represents a perspective of a device which 30 embodies my invention. Fig. 2 is a detached

view of the cover alone.

A represents a slide-ring of ordinary construction, and such as is used in the Wheeler & Wilson sewing-machine, and which is pro-35 vided with the almost vertical projection B at its top, and a second projection C at or near one side and just above the cross-bar D. This slide-ring is placed upon a suitable support (shown in dotted lines in Fig. 1) and se-40 cured thereto by a screw which passes through the slot a. The bobbin-cover G, of ordinary construction, is also provided with a projection I upon its face where it comes in contact with the slide-ring, and this pro-45 jection catches between the two projections upon the slide ring, so as to limit the amount of rotary motion the cover shall have. In order to prevent the thread from being caught between the surfaces of the slide-ring 50 and cover, where they come in contact, the slide-ring is finished so as not to catch or interfere with the thread.

In operating the machine the loop of the thread is caught by the rotating hook of the machine and carried over the bobbin-cover. 55 The take-up of the machine then draws the thread up, and the thread then passes over the projection on the bobbin-cover and also passes between the bobbin-cover and the two projections on the slide-ring. The projections are so finished as not to interfere with the free movement of the thread. The bobbin is placed within and supported by the hook, which is placed upon the end of a horizontally-revolving driving-shaft, as is com- 65 mon in revolving-hook machines, and the cover G is supported by the bobbin and slidering, between which it is placed in the usual manner.

Where the cover is caused to freely revolve 70 or turn by friction with the rotating hook, from two to three inches of thread are required to start the machine; but where the bobbin-cover is allowed but a slight turning movement, only about one-half inch of thread 75 is necessary to start the machine, and the thread is not liable to become tangled, as is the case where two or three inches are neces-

sary to start the machine.

I do not limit myself to the precise form 80. of stops here shown and described, for this may be varied without departing from the spirit of my invention.

Having thus described my invention, I

claim—

The combination, with the stitch-forming mechanism of a rotary-hook machine, of a supporting slide-ring and means for locking the same in any adjusted position, and a bobbin-cover, the former provided with two 90 projections upon its inner engaging surface separated a suitable distance, and the latter provided with a single projection upon its outer engaging surface vibrating between and alternately engaging the two upon the slide- 95 ring, whereby the cover is allowed only a limited rotary movement, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ANTHONEY MILLER.

Witnesses:

EDWARD TIERNAN, JACOB BERGER.