

No. 834,947.

PATENTED NOV. 6, 1906.

N. THOMPSON.
TYPE WRITING MACHINE.
APPLICATION FILED AUG. 4, 1906.

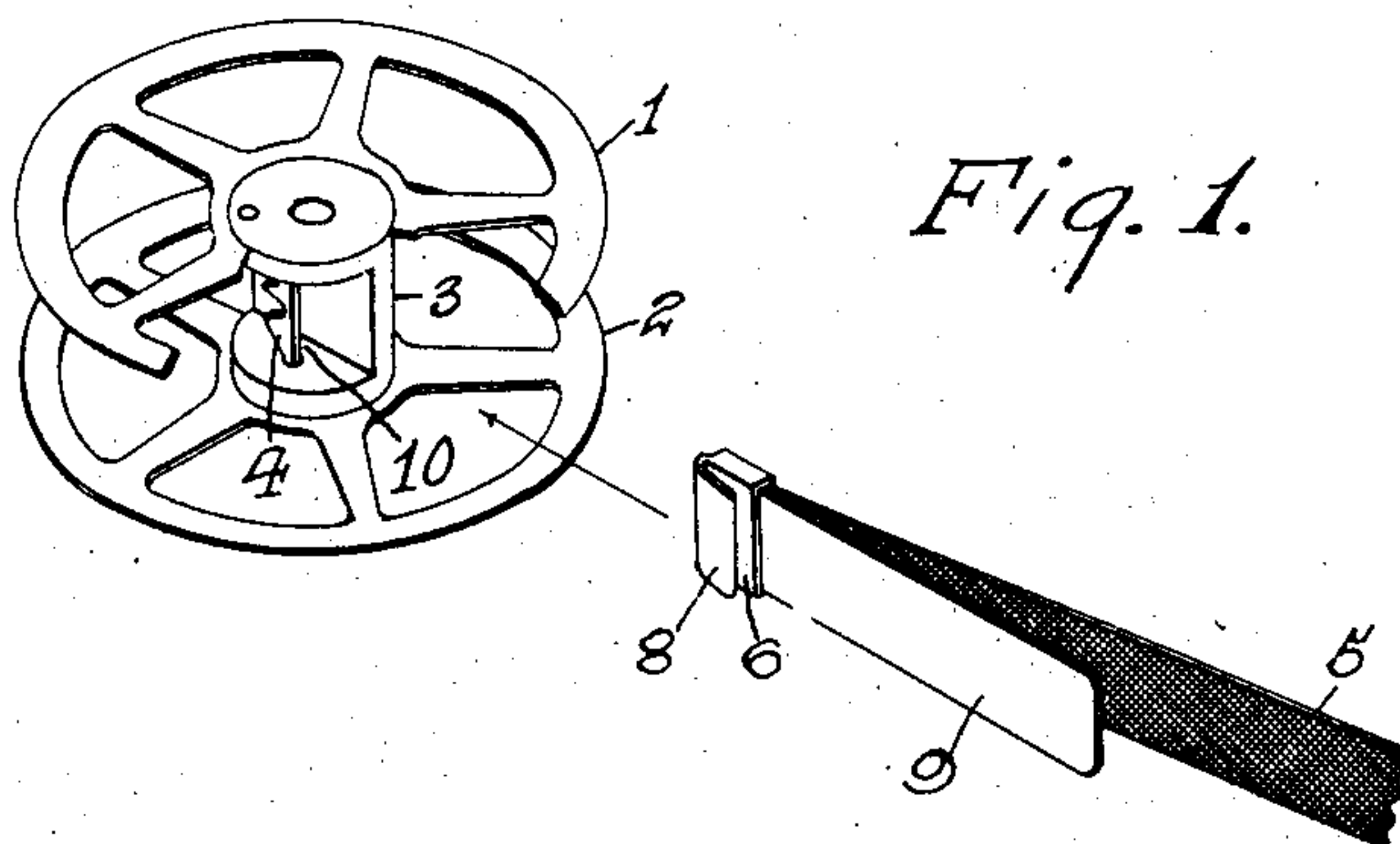


Fig. 1.

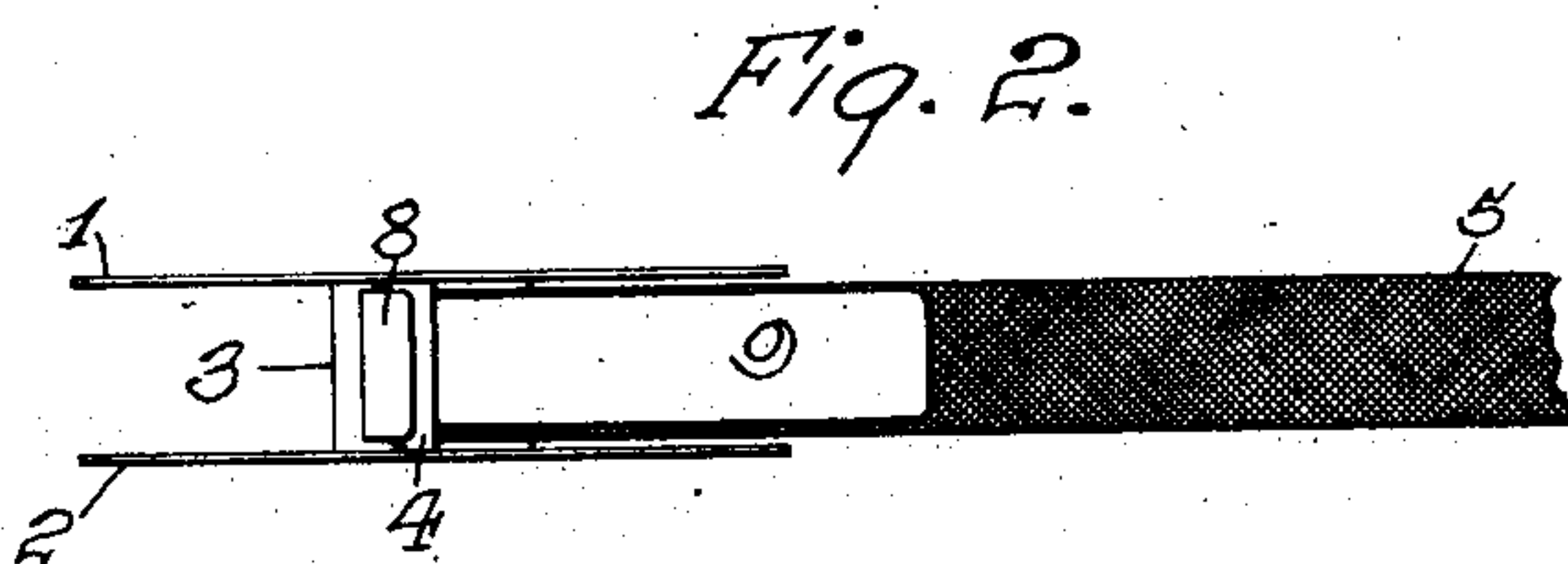


Fig. 2.

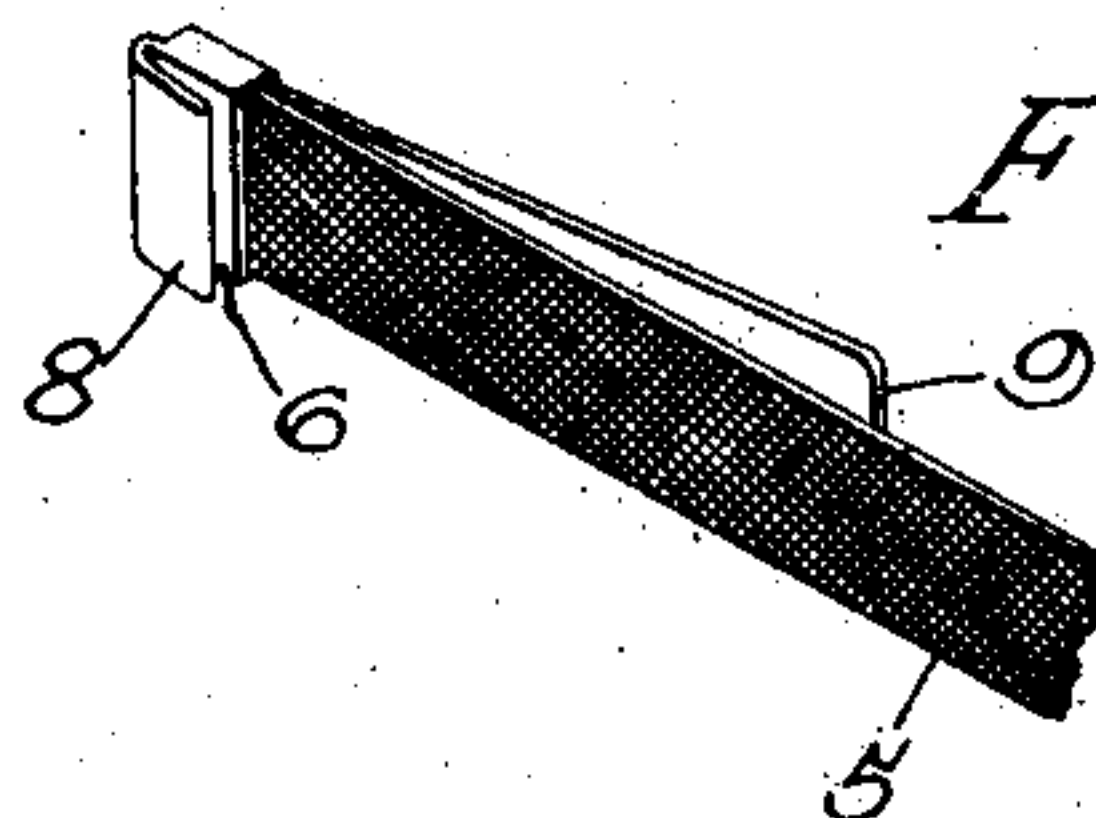


Fig. 3.

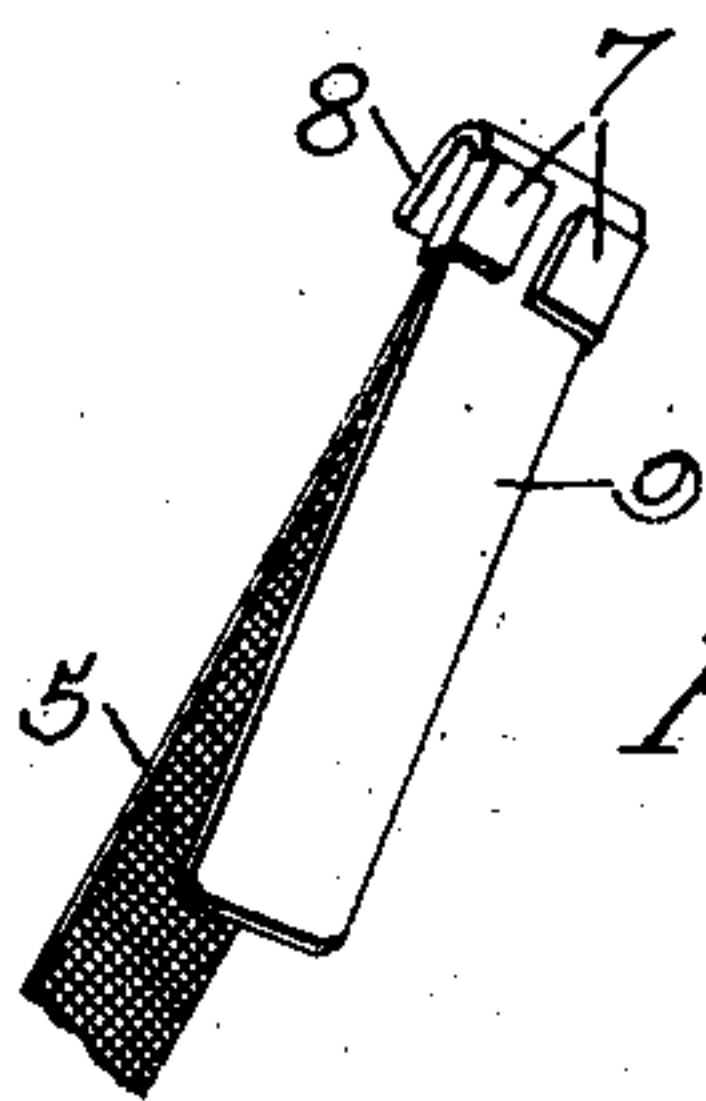


Fig. 4.

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UNITED STATES PATENT OFFICE.

NOMA THOMPSON, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A COR-
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TYPE-WRITING MACHINE.

No. 834,947.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed August 4, 1906. Serial No. 329,270.

To all whom it may concern:

Be it known that I, NOMA THOMPSON, a citizen of the United States, residing in Washington, District of Columbia, have in-
vented certain new and useful Improvements in Type-Writing Machines, of which the fol-
lowing is a specification.

This invention relates to ink-ribbons for type-writing and like machines, and particu-
larly to those machines which use narrow ribbons and have spools with their flanges so close together that it is not practicable to insert the fingers between them to secure the ribbon to the spool-cores. In such machines it has been the practice to provide catches upon the cores of the spools to hold the ends of the ribbon; but heretofore it has been necessary to employ a lead-pencil or any handy article to introduce the ribbon between the flanges and secure it upon the catch, which is a tedious operation and involves soiling of the fingers by the ink upon the ribbon and spool. The ribbon is usually introduced into a narrow passage between the catch and the core, and then by manipulation the catch is caused to bite the ribbon, but not securely, so that the ribbon is liable to become detached at times.

The object of my invention is to simplify the attachment of the ribbon to the spool and to attach it so securely that all liability of detachment is avoided. I provide the end of the ribbon with a tip in the form of a metal clip, which has a hook portion to engage the catch upon the spool, and I also use said clip for the purpose of holding the end of the handle, which extends from the clip along the ribbon but separate therefrom and is of such length that it may be employed by the operator to conveniently insert the hook within the spool and attach it to the ribbon-holding device thereon. The handle is preferably so long that it extends well outside of the spool when the hook is in position upon the core or catch of the spool, and the handle is separate from the ribbon, so that it is unnecessary in manipulating the former to soil the hands by contact with the ribbon. The handle may be in the form of a plate extending along the ribbon, and it is sufficiently flexible to wind readily around the spool-core within the coils of the ribbon. When detaching the ribbon, the handle may be straightened out (or, if re-

silient, it may recover its normal straight shape without aid) and forms a convenient implement ready to hand for unshipping the ribbon.

In the accompanying drawings, Figure 1 illustrates a ribbon provided with my improvements and the manner of attaching it to a spool. Fig. 2 shows the ribbon attached to the spool. Fig. 3 shows the handle secured upon the other side of the ribbon from the hook. Fig. 4 shows an opposite view of the Fig. 3 device.

The ribbon-spool (seen at Fig. 1) is of the type commonly employed on the Underwood type-writing machine and comprises flanges 1 and 2, which are quite close together, and a core 3. In the latter is provided the usual pin 4, upon which to catch the ribbon. Said pin is usually provided with teeth, as illustrated; but these may be omitted. Upon the ink-ribbon 5 I secure a clip comprising a plate 6, having ears 7 folded over the end of the ribbon and clamped thereto, said plate having an extension which is folded down to form a hook 8. Clamped upon the ribbon by means of the ears 7 is one end of a handle 9, which is preferably in the form of a thin celluloid blade extending along the ribbon but separate therefrom, so that it can be manipulated without touching the ribbon with the fingers.

In attaching the ribbon the free end of the handle 9 is picked up by the operator, and the handle is used like a needle, being thrust through the aperture 10, between the pin 4 and the core 3 of the spool. The handle is then drawn back to catch the hook 8 upon the pin 4, as at Fig. 2, whereby the ribbon is securely connected to the spool, the operation being extremely simple and speedy. The handle 9 is preferably of sufficient length to extend well outside of the spool when the hook is in position upon the pin 4, as seen at Fig. 2, and is preferably secured upon the other side of the ribbon from the hook, as at Figs. 3 and 4. Owing to its flexibility, the handle will readily wrap around the spool-core within the coils of ribbon and will prove convenient when the ribbon is unwound for detaching the latter from the spool.

Having thus described my invention, I claim—

1. An ink-ribbon having secured upon its

end a catch, and also having a handle extending along the ribbon to guide said catch within the spool, said handle being sufficiently flexible to enable it to coil around the core 5 of the spool.

2. A type-writer ribbon provided upon its end with a tip, and having a thin flexible handle attached to the end of said tip and extending along the ribbon and separate there- 10 from.

3. A type-writer ribbon provided upon its end with a tip, and having a thin flexible

handle attached to the end of said tip and extending along the ribbon, said tip being in the form of a sheet-metal clip which secures the 15 end of the handle to the end of the ribbon, and which also has a hook portion to catch upon the corresponding part of the spool-core.

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