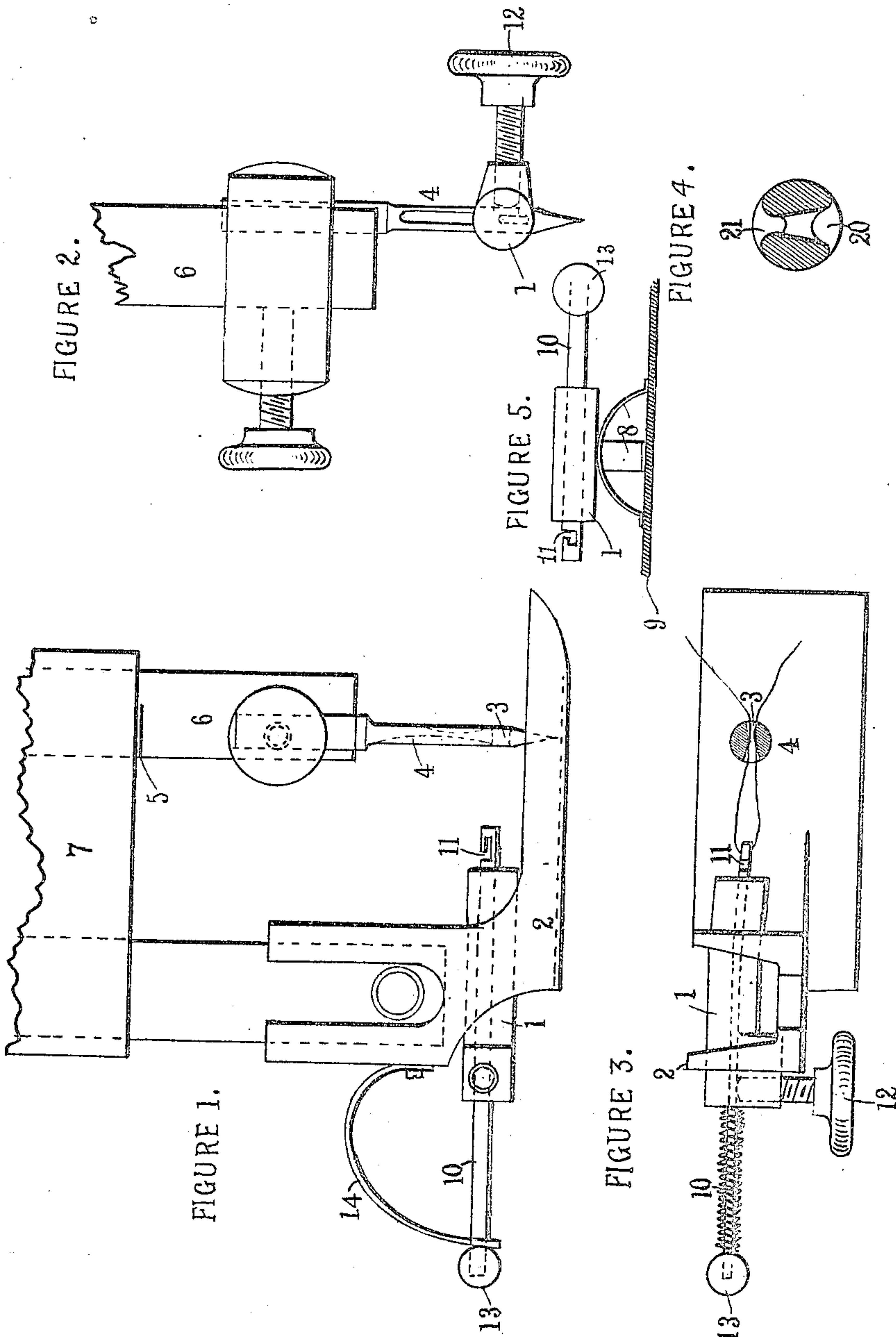


No. 813,138.

PATENTED FEB. 20, 1906.

S. BLUMENTHAL.  
NEEDLE THREADER FOR SEWING MACHINES.  
APPLICATION FILED MAY 12, 1905.



Witnesses  
A. H. Porter.  
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# UNITED STATES PATENT OFFICE.

SIGMUND BLUMENTHAL, OF NEW YORK, N. Y.

## NEEDLE-THREADER FOR SEWING-MACHINES.

No. 813,138.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed May 12, 1905. Serial No. 260,105.

*To all whom it may concern:*

Be it known that I, SIGMUND BLUMENTHAL, a citizen of the United States, residing at the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Needle-Threaders for Sewing-Machines, of which the following is a specification.

My invention relates to needle-threaders to be attached to sewing-machines; and my objects are to produce a device that is simple in construction, positive in operation, and which can be attached to existing machines, as well as built into new machines.

I attain my objects in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the device applied to a machine. Fig. 2 is a rear view of the threader-tube, showing its relation to the needle. Fig. 3 is a modified top view of part of the structure of Fig. 1; Fig. 4, a sectional view of a needle sometimes used in connection with the device. Fig. 5 is a view of my threader mounted on a keeper.

The device consists of a small tube 1, which is mounted either on the presser-foot 2 of the machine or on a keeper mounted on the machine for the purpose. The forward end of the tube 1 is separated from the needle 4 by a small distance, as shown, and in such position that the front part of the bore of the tube will aline with the eye 3 of the needle. It may be necessary to mount the guide-tube 1 on an extension-arm to obtain the proper alinement on those sewing-machines in which the eye of the needle is turned to the side instead of facing the operator, as shown in the drawings.

A guide-mark 5 may be made on the needle-carrying bar 6 and is so located that when it alines with some fixed part of the machine, as the bottom of the head 7, the eye 3 is in alinement with the threader 10.

The threader 10 consists of a flattened wire having the substantially L-shaped opening or hook 11 formed in its outer end. This threader 10 is pushed into the bore of the tube 1, as shown. The tube 1 may be slightly bent, as shown in Fig. 3, to create sufficient friction to prevent accidental displacement of the threader while the machine is in motion. A set-screw 12 may be provided to

clamp the threader at any desired point. A knob 13 at the inner end of the threader affords a convenient means of operating it. A light spring 14 may be used to normally hold the threader in its inoperative position, as shown in Fig. 1. This spring may be helical and wound about the threader 10.

In operation the sewing-machine is turned slowly until the mark 5 alines with the bottom of the head 7, thereby indicating that the eye of the needle is alined with the threader. The threader 10 is then pushed forward until the hook 11 has passed clear through the eye, the end of the thread is laid in the hook 11, and the threader is retracted, either manually or by the operation of the spring 14, drawing the thread through the eye in so doing. The thread may then be cleared from the hook 11 and the sewing-machine is then ready for operation.

For use in connection with this needle-threader I have designed a needle provided with a special eye, as shown in Fig. 4. When coarse thread is used with a fine needle, the eye shown is used. This eye is funnel-shaped, the threader being pushed through from the small end and the thread laid in the hook. When the threader is retracted, the thread is pulled through from the large end, the gradually-narrowing eye packing or compressing the thread, so that it can be drawn through.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A needle-threader for sewing-machines comprising a slightly-bent guide-tube mounted on the machine adjacent to the needle, a threader consisting of a straight, flattened wire, pointed at one end and having a substantially L-shaped opening near that end, adapted to enter and pass through the eye of the needle to engage the thread, said threader closely fitting and slidably secured in the bent guide-tube and means for indicating that the threader and eye of the needle are in operative alinement.

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

SIGMUND BLUMENTHAL.

Witnesses:

ROBT. B. KILLGORE,  
FRANK H. WIMMEL.