

(No Model.)

G. BLAKENEY.

MOISTENING ATTACHMENT FOR SHOE SEWING MACHINES.

No. 378,759.

Patented Feb. 28, 1888.

Fig. I.

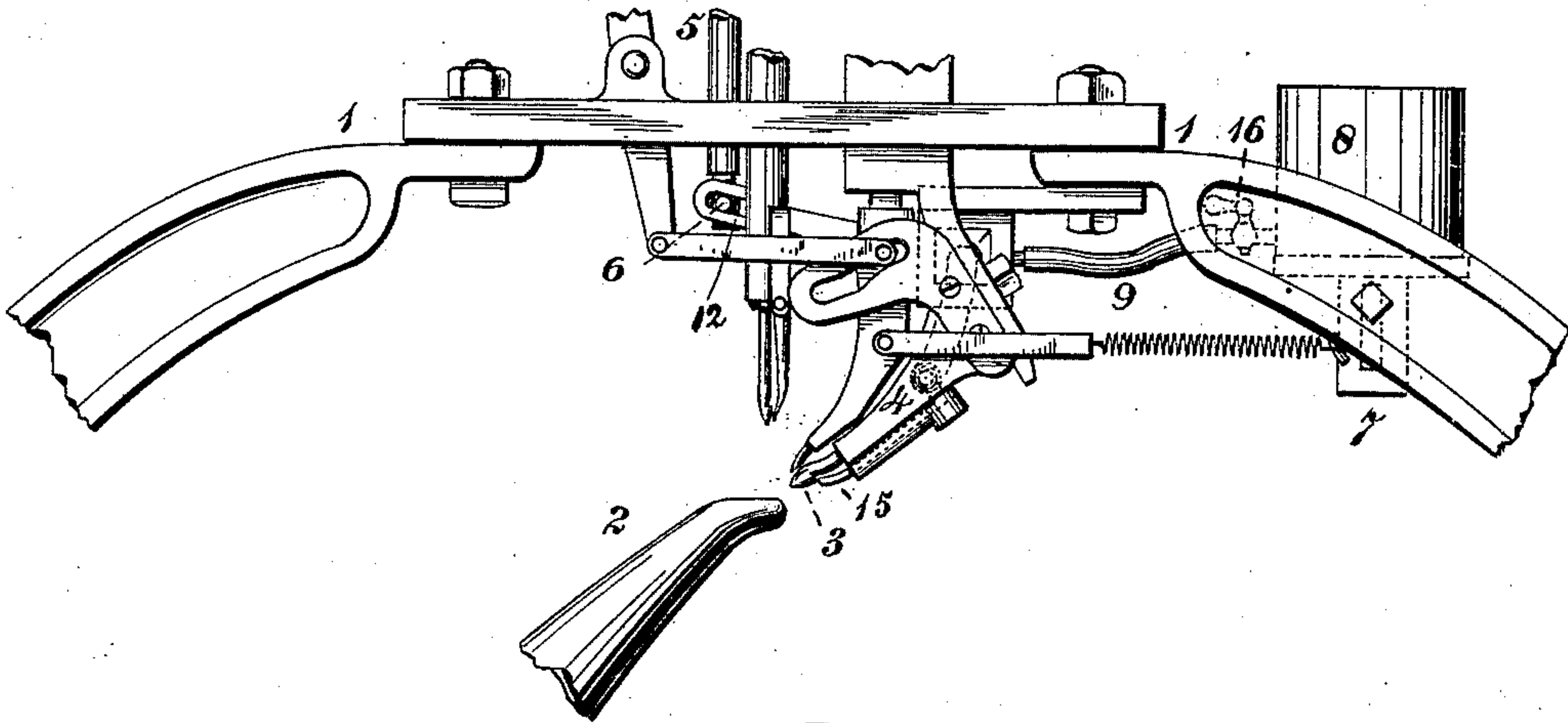


Fig. III.

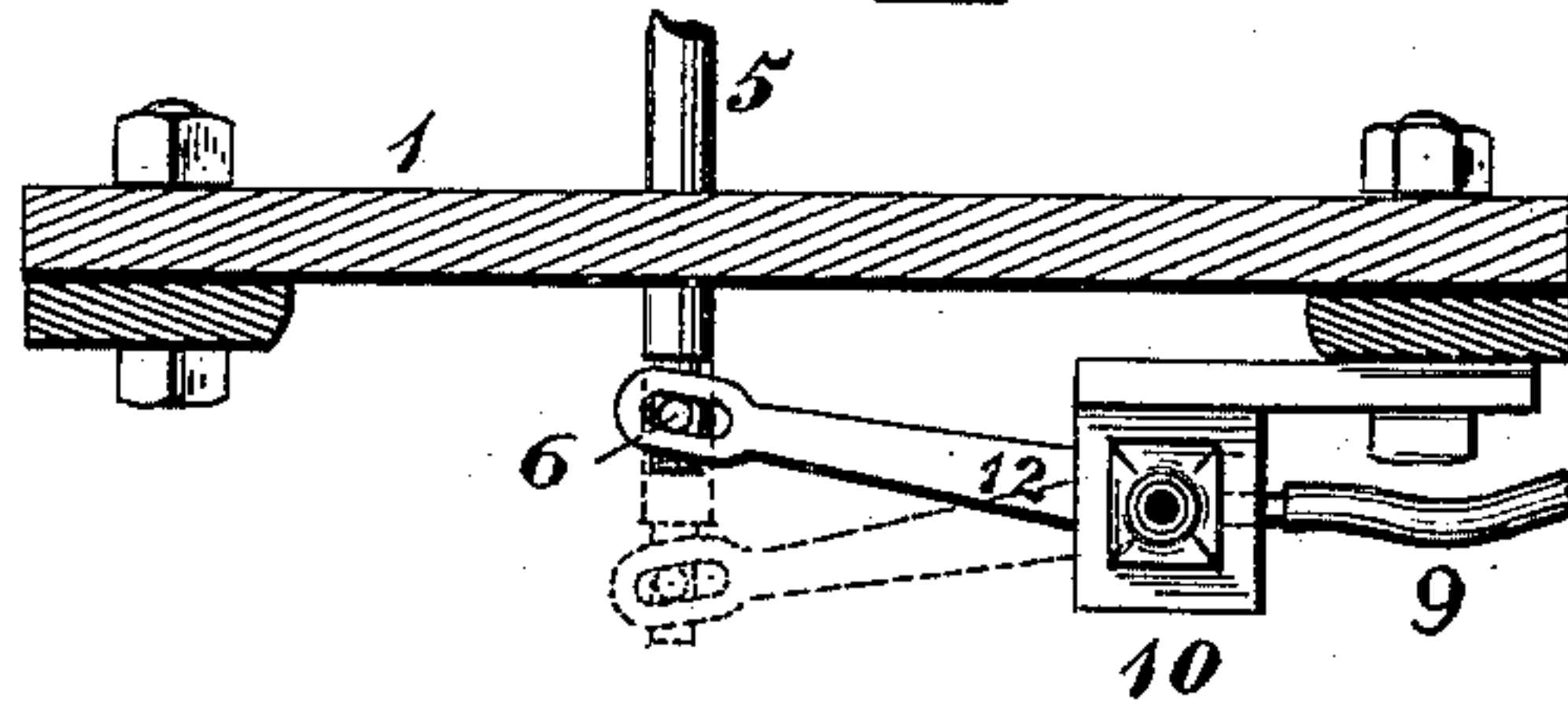


Fig. VII.

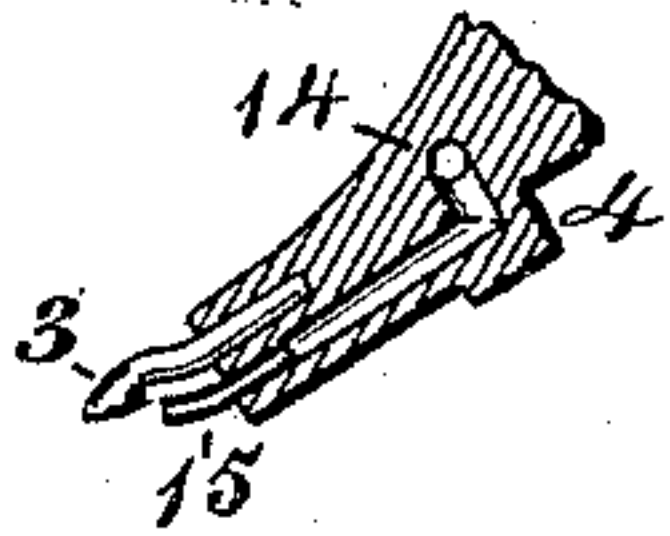


Fig. II.

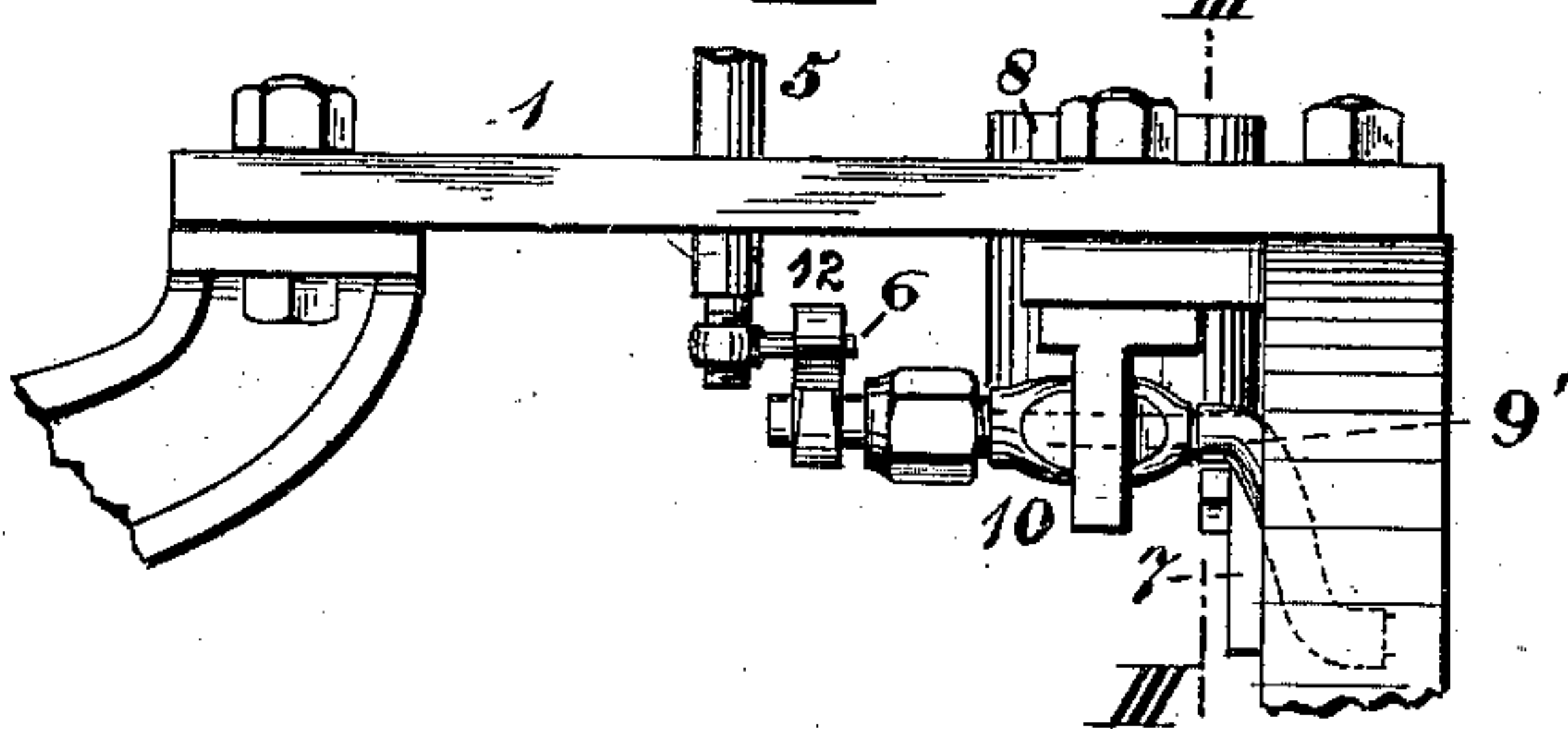


Fig. IV.

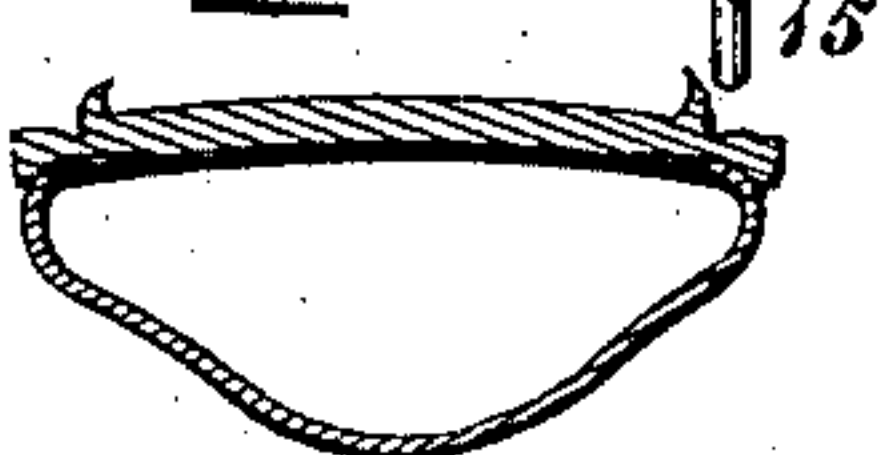


Fig. V.

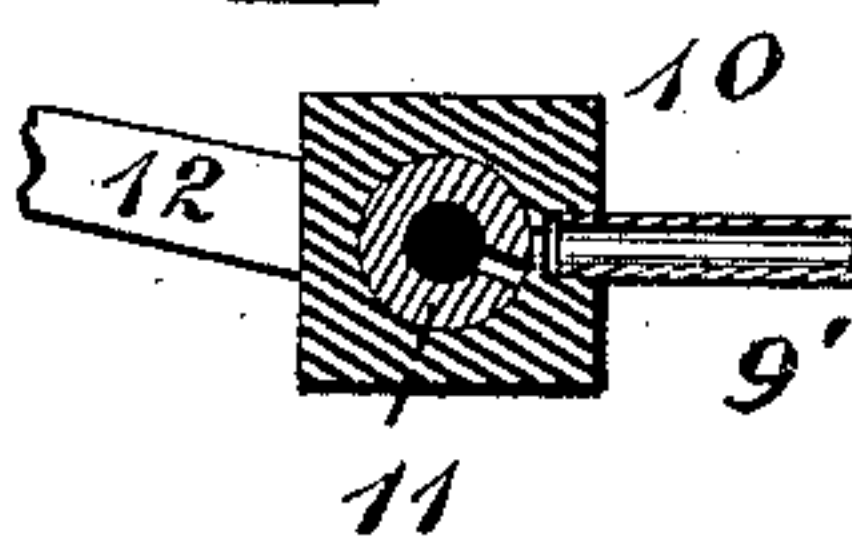
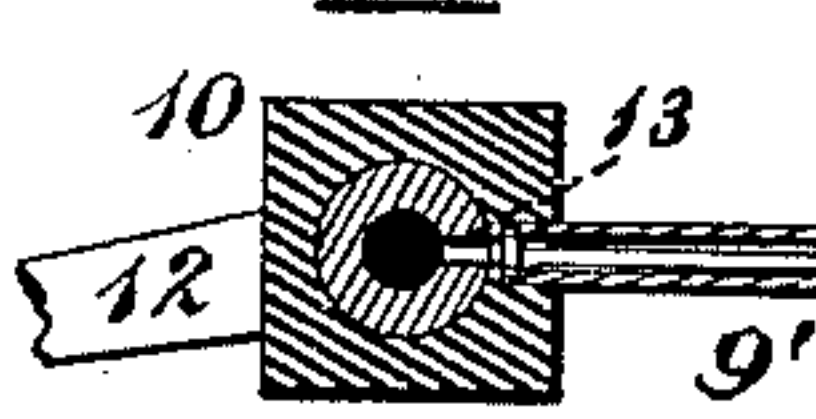


Fig. VI.



Attest.

Geo. H. Knight, Jr.

Edward Star.

Inventor.

George Blakeney.

By Knight Bros. Atty's.

UNITED STATES PATENT OFFICE.

GEORGE BLAKENEY, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO
CHARLES H. KRIPPENDORF, OF SAME PLACE.

MOISTENING ATTACHMENT FOR SHOE-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 378,759, dated February 28, 1888.

Application filed May 9, 1887. Serial No. 237,590. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BLAKENEY, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Moistening Attachment for Shoe-Sewing Machines, of which the following is a specification.

My invention consists in an attachment or appendage to machines for stitching or sewing together the sole and upper of a shoe or boot, whereby water or other lubricant is automatically conducted to that part of the trough of the sole-groove which is about to be pierced by the stitching-needle.

In the accompanying drawings, Figure I is a front elevation of my said appendage and of contiguous parts of a shoe-sewing machine, all in their normal or inactive condition. Fig. II is a side elevation of certain of said parts. Fig. III is a section on the line III III, Fig. II. Fig. IV is a transverse section of a shoe, with part of the nozzle of the water-carrier. Figs. V and VI are transverse sections of the water-delivering cock in its closed and open conditions, respectively. Fig. VII is a vertical section (parallel with the feed) of the discharging portion of the water-duct.

1 and 2 respectively represent parts of the frame and of the horn for stitching a shoe-sole to its upper.

3 represents the presser-foot, and 4 its holder.

5 shows a vertically-reciprocated fulcrum-post that differs from the customary vertically-reciprocated fulcrum-post in possessing a downward extension or prolongation below the lower guide of the frame and in having said prolongation armed with a lateral projection or pin, 6, for a purpose to be presently explained.

A bracket, 7, (which may be vertically adjustable, as shown,) supports a water tank or reservoir, 8, from which a pipe or a flexible hose, 9, leads to cock or valve 10, whose spigot 11 has slotted arm 12, which receives and is periodically vibrated by the pin 6, that projects from the reciprocating fulcrum-post 5. The ventage 13 of the cock 10 communicates, when the cock is open, with a second pipe or hose, 9', which conducts into a passage, 14, in the presser-foot holder 4, which passage emp-

ties into the discharge-nozzle 15. The location of the said discharge-nozzle 15 is such as to place its ventage in such close proximity to the side of the said presser-foot remote from the needle as to convert the said foot side or surface into a surface conduit (operating by capillary attraction) for the escaping water into the trough or bottom of the sole-groove.

The disposal and proportions of the operative parts are such as at each descent of the needle to cause a small predetermined quantum of water to drip or trickle along the exterior surface of the presser-foot into that portion of the trough of the sole-groove which is about to be penetrated by the stitching-needle. The stock being lubricated and rendered pliant and elastic by the application to it of the water in the manner and place stated, yields without tearing to the stitching-needle, and on the retreat of the latter closes compactly around the chain or stitch, which, not encountering any of the asperities characteristic of dry sole-leather, can be drawn tightly and with economy of thread and with intimate contact of sole and upper into the thus temporarily-softened stock. The wetting being restricted to the trough of the groove and the contiguous underlying parts of the insole, the shoe is not rendered unsalable by staining or buckling of the exposed surfaces which accompanies the manual application of water as now sometimes practiced.

The described location of the nozzle, while securing thorough moistening of the objective parts, makes it impossible that any water should reach the horn-orifice and its contained mechanism.

The above-described preferred form of my invention may be varied as to some of its details. For example, the water-supply may be regulated wholly or partially by an ordinary faucet, 16, or other suitable device or expedient under direct control of the operator.

The automatic opening and closing of the regulating-cock may be obtained by connection with any suitable moving member, and may be itself adjustable, if desired.

Substantially uniform water-pressure may be derived from any customary or suitable mechanical expedient, such as a water-trap,

a steam-generator, or an ordinary hydrant service-pipe.

I claim herein as new and of my invention--

1. The combination, with the horn, presser-
5 foot, and needle of a shoe-sewing machine, of
a water-head whose duct leading therefrom has
a discharge-nozzle near the presser-foot on the
side remote from the needle, and a cock or regu-
lator whereby the stock is moistened imme-
10 diately in advance of the descending needle,
substantially as and for the purpose set forth.

2. In combination with the horn, presser-
foot, needle, and reciprocating fulcrum-post of a

shoe-sewing machine, a water-head whose duct
leading therefrom has a discharge-orifice near 15
the presser-foot on the side remote from the
needle, a cock, and connections between the
fulcrum-post and the cock whereby the cock
is periodically operated by the said post, sub-
stantially as and for the purpose set forth. 20

In testimony of which invention I hereunto
set my hand.

GEORGE BLAKENEY.

Attest:

GEO. H. KNIGHT,
SAML. S. CARPENTER.