

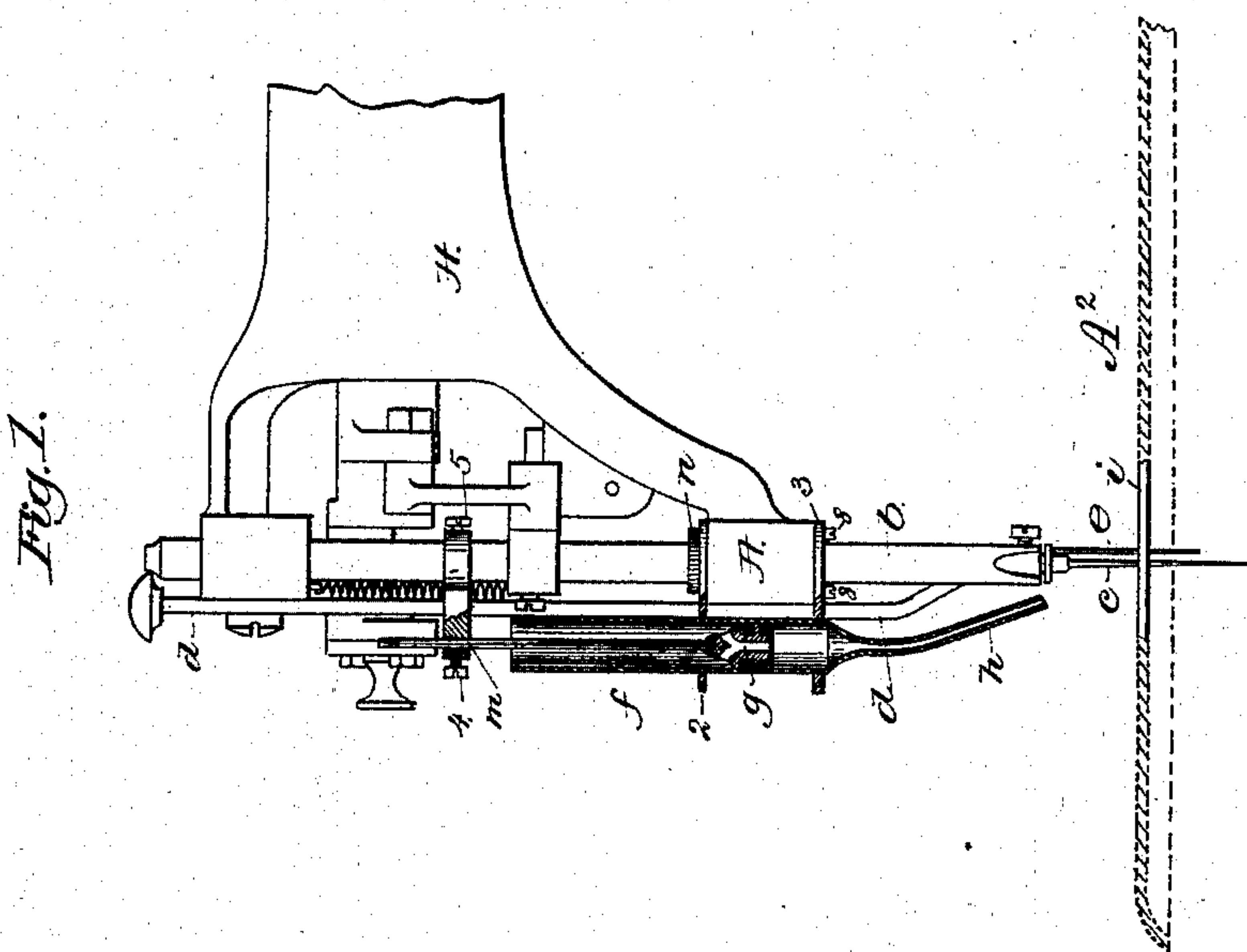
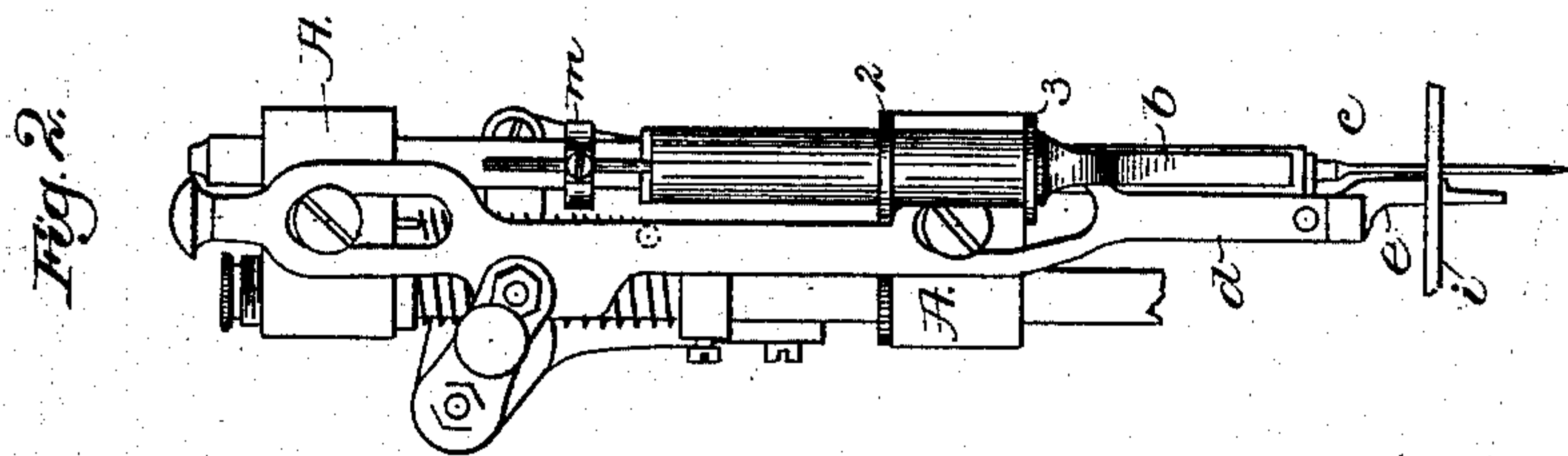
(No Model.)

W. A. NEELY.

TRIMMING ATTACHMENT FOR SEWING MACHINES.

No. 274,095.

Patented Mar. 13, 1883.



Witnesses.

John F. C. Prentiss
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UNITED STATES PATENT OFFICE.

WILLIAM A. NEELY, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
WHEELER & WILSON MANUFACTURING COMPANY, OF SAME PLACE.

TRIMMING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 274,095, dated March 13, 1883.

Application filed October 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. NEELY, of Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Trimming Attachments for Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to that class of sewing-machines employed to stitch and trim fabric or material near the line of stitching, usually along the edge of the material, and has for its object to provide means to produce a current or blast of air to blow the waste material away from that part of the bed-plate containing the needle-hole and throat-plate in which the cutter or trimmer blade works. In a sewing-machine running at high speed and trimming knit and other goods the waste material clogs under the cutter or trimmer blade and needle and causes the operator very considerable trouble to keep the said waste material brushed aside out of the way.

In my invention, as herein embodied, I have produced a current or blast of air by means of a force-pump operated by the needle-bar, and I have applied my invention to a Wheeler & Wilson sewing-machine; but it is obvious that it might be applied to any other suitable sewing-machine, and that the particular device for generating or creating the current or blast of air might be varied by employing any well-known equivalent air-forcing apparatus without departure from my invention.

My invention consists essentially in a cutting or trimming device, a needle-bar, needle, bed-plate, and connected throat-plate, combined with an air-forcing apparatus to create a current or blast of air, by which to blow the waste material from the said bed-plate about and near the said throat-plate, as will be hereinafter more fully described, in order to prevent clogging of and keep the throat-plate clear and unobstructed.

Figure 1 represents in side elevation a sufficient portion of a Wheeler & Wilson No. 10 sewing-machine to show one practical embodiment of my invention, and Fig. 2 a left-hand side view of Fig. 1.

A is the overhanging arm, A² the bed-plate, *b* the needle-bar, and *c* the needle. The carrier *d* and its attached cutter or trimmer blade *e* are substantially as in United States Patent No. 212,122. The throat-plate *i* has in it a hole for the passage of the needle and a slit for the passage of the cutter or blade.

In the drawings I have applied to the head of the machine an air-forcing apparatus of the variety known as an "air-pump," it being composed, as herein shown, of a cylinder, *f*, and plunger *g*, having suitable valves and passages, whereby when the plunger is reciprocated a current or blast of air will be emitted from the pipe *h*, the open end of which terminates above the usual throat-plate, *i*, of the bed-plate A², near or at one side of the holes or slots therein through which the blade *e* and the needle work. The upper end of the plunger of the air-pump is connected by screw 4 with an arm, *m*, attached to the needle-bar by a screw, 5, the needle-bar, in its reciprocations in the usual manner, actuating the plunger.

The pump-cylinder has attached bearing-plates 2 3, which are fitted to a portion of the arm A, the bushing *n*, in which the needle-bar slides, and screws 8, extending through plate 3, serving to retain the said pump-cylinder in place.

In this my invention, and by the apparatus described, the waste material will be blown away from the throat-plate, leaving the same where the work is supported and being stitched and trimmed free from accumulations of waste, and enabling the operator to do better work.

Instead of the reciprocating plunger, I might employ a rotary fan or blower to create a current or blast of air.

I do not claim an air-forcing apparatus, except when combined with a bed and throat plate and with a needle and trimming device, the air-forcing apparatus operating to clear the throat-plate from and prevent its obstruction by waste.

I claim—

The overhanging arm, its head, cutting or trimming device, needle-bar, needle, and air-forcing apparatus, sustained by the said head above the material to be trimmed, combined

with the bed-plate and its connected throat-plate, upon which the material to be trimmed is laid and over which it is fed intermittingly, the said air-forcing apparatus operating to
5 blow the waste material from the throat-plate and from under the needle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM A. NEELY.

Witnesses:

G. W. GREGORY,
B. J. NOYES.