

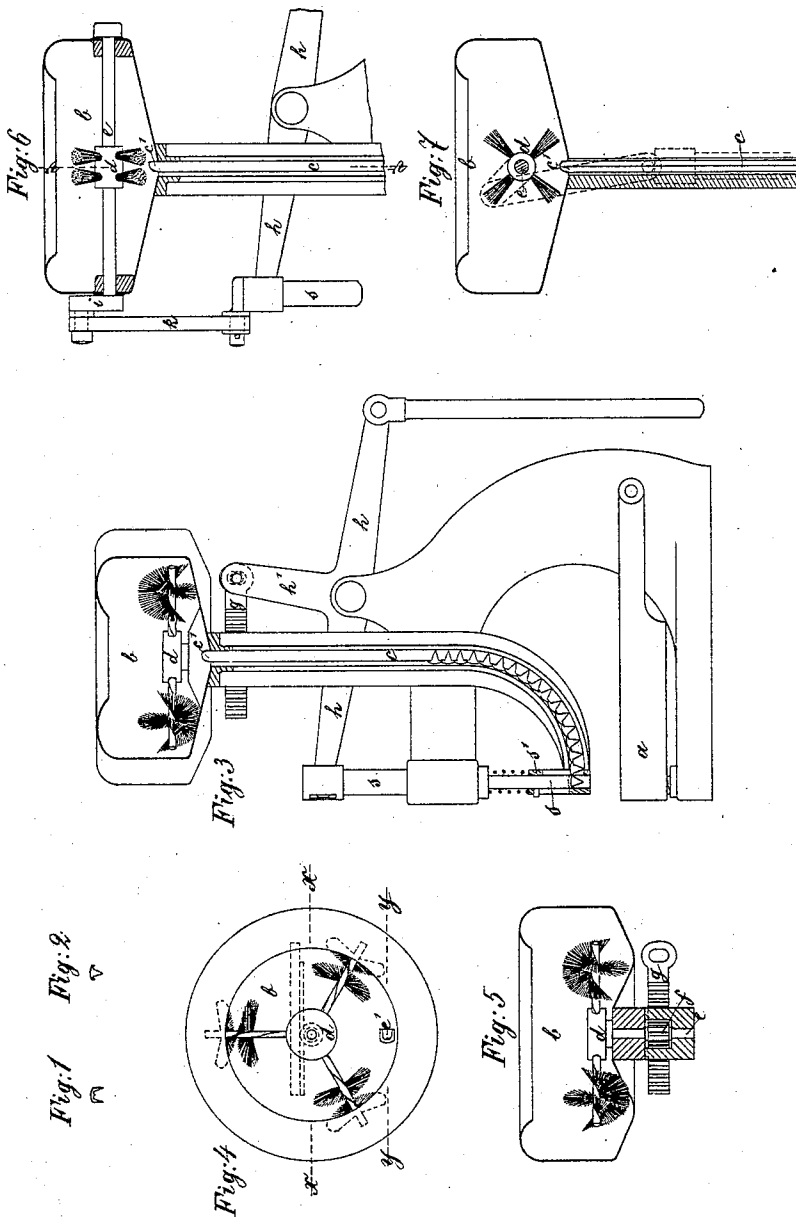
(No Model.)

J. TEMLER.

SELF FEEDING ARRANGEMENT FOR RIVETING MACHINES.

No. 575,135.

Patented Jan. 12, 1897.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEF TEMLER, OF WARSAW, RUSSIA, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO THE NATIONAL METAL EDGE BOX COMPANY, OF NEW JERSEY.

SELF-FEEDING ARRANGEMENT FOR RIVETING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 575,135, dated January 12, 1897.

Application filed November 9, 1895. Serial No. 568,493. (No model.)

To all whom it may concern:

Be it known that I, JOSEF TEMLER, a subject of the Emperor of Russia, residing at Warsaw, in the Russian Empire, have invented a new and useful Improved Self-Feeding Arrangement for Riveting-Machines, of which the following is a specification.

In the drawings, Figure 1 is a side and Fig. 2 an end view of a rivet, such as that upon which a machine embodying my invention is designed to operate. Fig. 3 is a side view, partly in section, of a machine embodying my invention. Fig. 4 is a plan view, and Fig. 5 an end section, of the receptacle for containing the rivets and the brushes for conducting them into the feeding-channel; and Figs. 6 and 7 are respectively side and end sections of a modified construction of receptacle and brushes and a modified means of actuating the brushes.

This invention relates to riveting-machines of that class which serve to unite cardboard, leather, or the like, by means of rivets, such as shown in Figs. 1 and 2.

As will be seen in Fig. 3, such a machine consists, substantially, of an anvil *a*, serving to support the parts to be connected, and a plunger *s*, vertically moved by a lever *h*, and serving to force in and fix the rivets, the lower end of the plunger being surrounded by a sleeve *s'*, longitudinally movable thereon. The latter holds each sheet-metal rivet brought under the plunger *s* and serves to guide such rivet while it is being driven into the parts to be connected thereby.

To enable the rivets to arrive under the plunger *s* and into the interior of the sleeve *s'*, the latter has an aperture at a point just beneath the plunger when the latter is in its upper position. Into this aperture leads a channel *c*, by means of which the rivets are fed to the plunger *s* in that position which they are to occupy under it in order to be applied by the plunger to form a connection. Automatically to supply to this channel with as many rivets (when the machine is working) as it in turn supplies under the plunger *s* is the object of this improved feed device. As will appear from the accompanying drawings, this may be constructed in various ways. It,

however, always consists of a receptacle *b*, provided at the upper part of the channel *c*, the sheet-metal rivets being poured into the receptacle, and a movable brush *d*, having an alternating motion operating to conduct the rivets into the channel *c* when the riveting-machine is in operation.

In the construction shown in Figs. 3 to 5 the bottom of the receptacle *b* assumes the shape of a concentric groove and in the modification shown in Figs. 6 and 7 that of a funnel. In the construction illustrated by Figs. 3 to 5 the mouth of the channel *c* lies at the bottom of the concentric groove; in that shown in Figs. 6 and 7 it lies in the lowermost part of the funnel. In either case the part *c'* of the channel *c* that serves to guide the rivets rises slightly above the bottom of the receptacle *b*. The aperture surrounding this part *c'* is of such shape and dimensions that it will only admit one rivet at a time and that only in a certain position.

In the construction shown in Figs. 3 to 5 the brush *d* works on a vertical axle *e*, standing in the center of the receptacle *b*. In Figs. 6 and 7 it is shown as working on a horizontal arbor. In the former case a toothed wheel *f* is provided on the spindle *e*, and a rack *g* engages therewith, the latter being connected with an arm *h'* on the lever *h*. At each up-and-down motion of the lever the rack moves to and fro once and thereby turns the brush *d* first in one direction and then in the other, but the brush each time makes only one-half to two-thirds of a complete revolution.

In the construction illustrated by Figs. 6 and 7 an arm *i* is provided on the arbor of the brush upon which acts (by means of a connecting-rod *k*) either the plunger *s* or the lever *h*. In this case also each operation of the riveting-machine causes a to-and-fro movement of the brush. In both of these forms of feed device the brush will, first from one side, then from the other, force a certain number of rivets contained in the receptacle *b* toward the mouth of the channel *c*.

If the rivets are in the proper position, they fall into the channel *c*. Otherwise they are moved aside when the brush *d* reverses its movements and subsequently again brought

forward until by the continued motion they have been turned into the proper position for entering the channel c.

5 Having fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

10 In a riveting-machine, the combination with a plunger for driving the rivets, and a sleeve containing the lower end of the plunger for guiding the rivets, of a channel communicating with the lower end of said sleeve and opening thereinto in a substantially horizontal direction, a receptacle above the mouth of said channel, said receptacle being horizontally disposed and having a sloping bottom leading to the channel, a guide in said channel projecting slightly above the bottom of

the receptacle, making a closed channel conforming in shape in cross-section to the shape of the rivet, a brush for directing the rivets into the channel adapted to reciprocate over the mouth of the channel, a lever connected with a source of power, and a connection between said lever and the brush, and between said lever and the plunger, whereby the rivets are fed and driven simultaneously, substantially as described. 20 25

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

JOSEF TEMLER.

Witnesses:

HERNANDO DE SOTO,
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