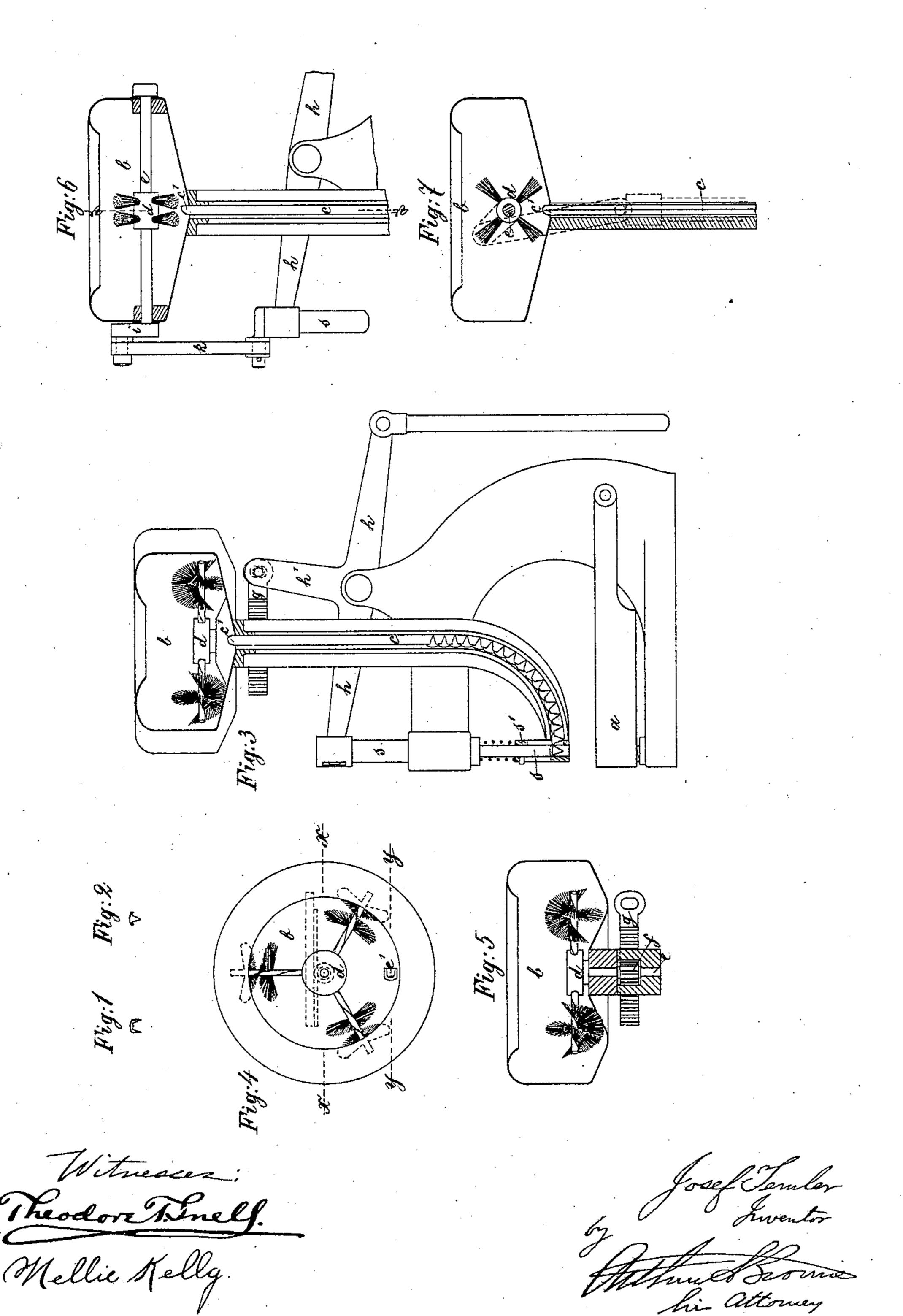
(No Model.)

J. TEMLER.

SELF FEEDING ARRANGEMENT FOR RIVETING MACHINES.

No. 575,135. Patented Jan. 12, 1897.



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 of 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.

45 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,

50 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 55 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 lower-65 most 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 70 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. 75 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-80 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 90 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 95 *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 100

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

Having fully described my invention, what I claim, and desire to secure by Letters Pat-

ent of the United States, is-

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 chan-

nel 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 20 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.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

JOSEF TEMLER.

Witnesses:

HERNANDO DE SOTO, C. F. ROSENCRANTZ.