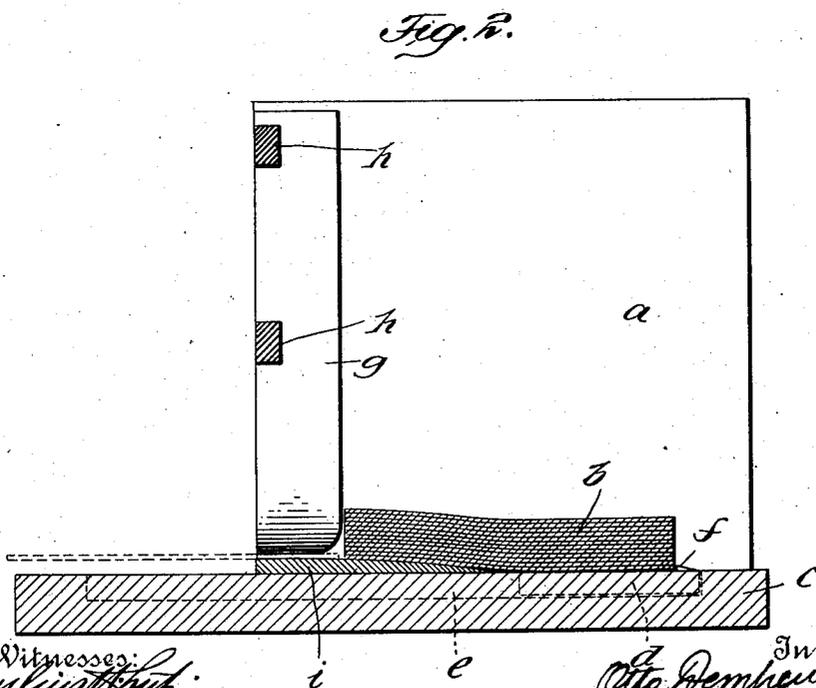
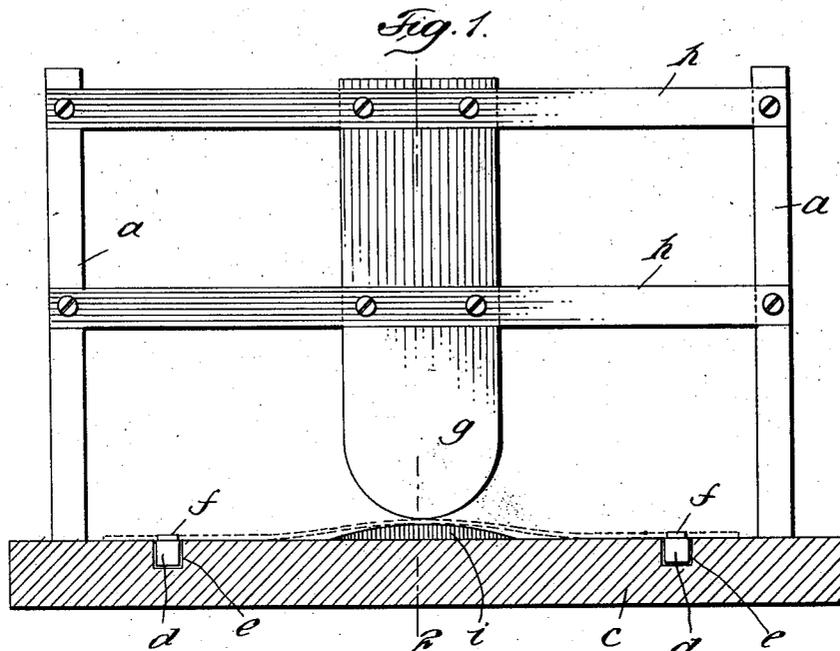


O. DEMPEWOLF.  
 MEANS FOR FEEDING METAL SHEETS.  
 APPLICATION FILED SEPT. 8, 1910.

1,027,598.

Patented May 28, 1912.



Witnesses:  
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# UNITED STATES PATENT OFFICE

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MEANS FOR FEEDING METAL SHEETS.

1,027,598.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed September 8, 1910. Serial No. 581,053.

To all whom it may concern:

Be it known that I, OTTO DEMPEWOLF, of the city of Brunswick, Germany, have invented certain new and useful Improvements in Means for Feeding Metal Sheets, of which the following is a full, clear, and exact specification, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a means for feeding one at a time sheets of metal from a pile of such sheets.

The invention has various applications, but its most important use is in connection with or has parts of a machine for manufacturing tin cans in which the tin sheets are fed one at a time to the forming devices.

The object of my invention is to insure the delivery of but one sheet at a time and avoid two or more passing out either directly superimposed or overlapped. I have found by experiment that the sheets tend to adhere to each other and this makes the operation difficult. I accomplish the purpose in view by providing means which cause the moving sheet to be flexed in one or several directions, thus separating it from the other sheets somewhat in the manner that printers flex the top sheet of a pile of paper in the act of separating that sheet from the pile.

My invention involves various other features of importance, all of which will be fully set forth hereinafter and particularly pointed out in the claims.

Reference is now had to the accompanying drawings which represent, as an example, the preferred embodiment of my invention.

In these drawings—Figure 1 is a front elevation of a magazine with the table in section; and Fig. 2 is a section on the line 2—2 of Fig. 1.

*a* indicates the magazine in which the sheets *b* are superimposed. The construction of the magazine as well as various of the other parts may be varied widely without departing from my invention. The drawings indicate the magazine in outline merely. Below the magazine is the feeding table *c* with suitable devices for engaging and advancing the sheets one at a time. These devices are here shown as slides *d* operating in guideways *e'* and having slide

shoulders *f* projecting above the surface of the feed table *c* to engage the sheets one at a time. Of these slides *d* 2 are shown in the drawings. No means for driving the slides are shown, as this forms no part of my invention. The projecting shoulders *f* of the slides should be of sufficient extent to engage only one sheet at a time.

*g* indicates a stop bar which is held to the vertical discharge end of the magazine by any suitable means, for example, the rods *h* of the drawings. This stop bar projects down to the point near the bottom of the magazine and it is preferably rounded at its lower end as shown in Fig. 1. I also prefer slightly to round the inner side of the stop bar at its lower extremity as shown in Fig. 2. Under the lower end of the stop bar and fastened on the table *c* or formed integral therewith is a flexing projection *i*. This is separated from the lower extremity of the stop bar for a space sufficient to permit the discharge of a single sheet. The said flexing projection *i* is rounded transversely as shown in Fig. 1 and it tapers longitudinally from the end within the magazine to its highest point as shown in Fig. 2. Said flexing projection extends from the point under the stop bar inward well into the magazine.

In the operation of the device the sheets lie on the inner end of the flexing projection and they are flexed in two directions by the same, namely, they are flexed longitudinally of their line of movement by tapering in the projection *i* in a longitudinal direction and they are flexed transversely of their line of movement by the transverse curvature of said projection *i*. Therefore when the bottom sheet is engaged by the shoulder *f* and drawn forward the sheet is given a series of diverse flexures which tend to separate it effectually from the sheet above and prevent the adherence which would otherwise interfere with the movement of the sheet. This flexing takes place principally in lowermost or moving sheet and, the sheets above being stationary are imperceptibly flexed. This condition is advantageous to the operation which I have described.

I have shown and described and prefer to employ means for flexing the sheets in a plurality of directions, but this is not strictly essential to my invention, since flex-

ing in one direction only is but a matter of degree.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with means for holding and feeding, one at a time, from the bottom of a pile of metal sheets, of a projection in the path of the moving sheet to flex the same during its movement, for the purpose specified, said projection tapering in two crossing directions to produce a plurality of flexures in the sheet.

2. The combination of means for holding a stack of sheets and means for advancing the sheets one at a time from the bottom of the stack said holding means having a projection upon its supporting surface and partly disposed beneath said stack so as to hold the bottom sheet flexed or bent trans-

versely of the direction of movement of said sheets as they are fed from the stack.

3. The combination of means for holding a stack of metal sheets said means presenting a substantially flat supporting surface and a projection intermediate the side edges of said surface and curved transversely and normally disposed beneath an edge portion of the stack and means upon the opposite side of said projection for advancing the sheets one at a time from the bottom of the stack and over said projection.

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

OTTO DEMPEWOLF.

Witnesses:

ERNST MEVES,  
FRIEDRICH BRANDES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."