F. A. TIBBAIS.

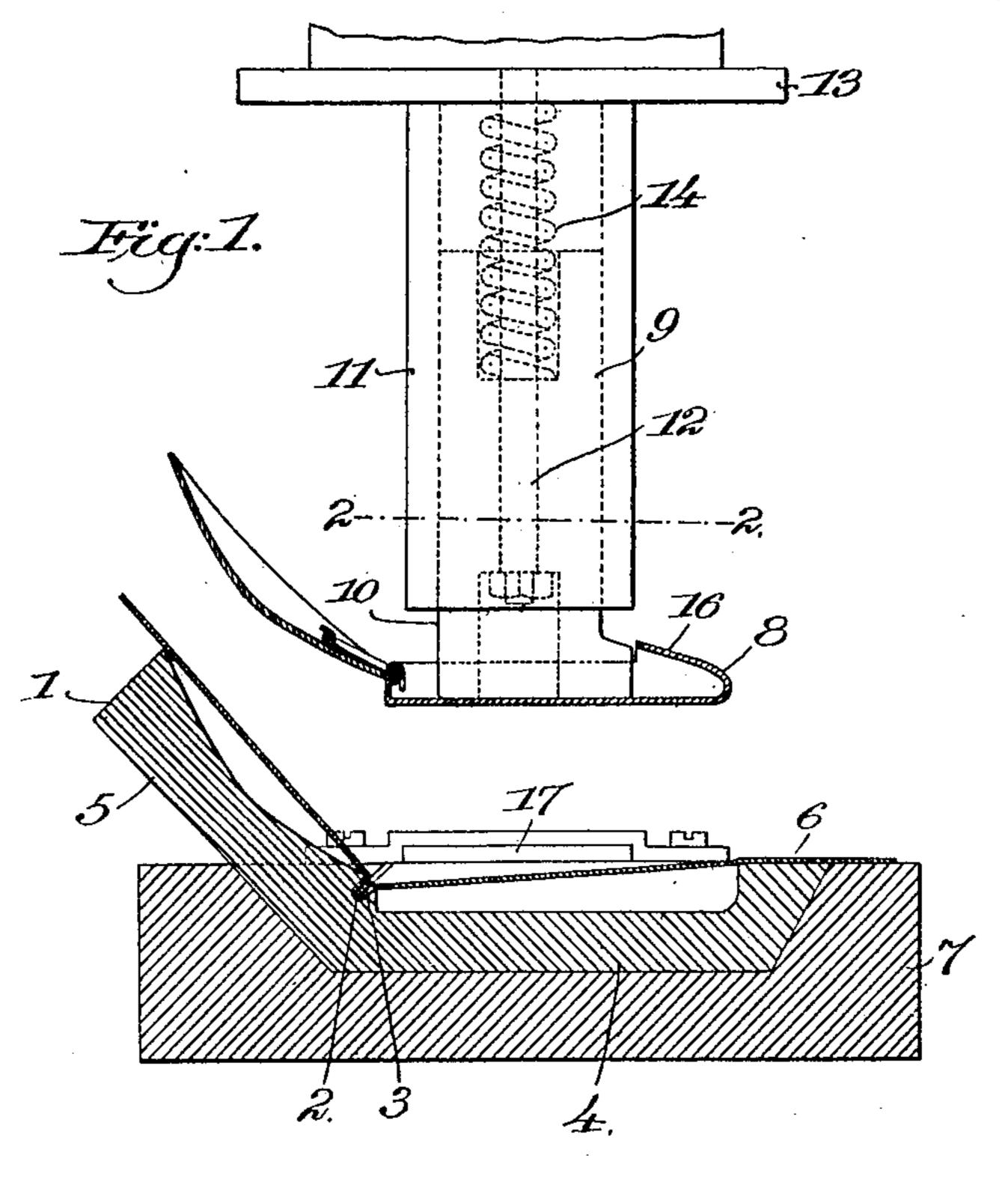
MACHINE FOR COVERING EYEGLASS CASES.

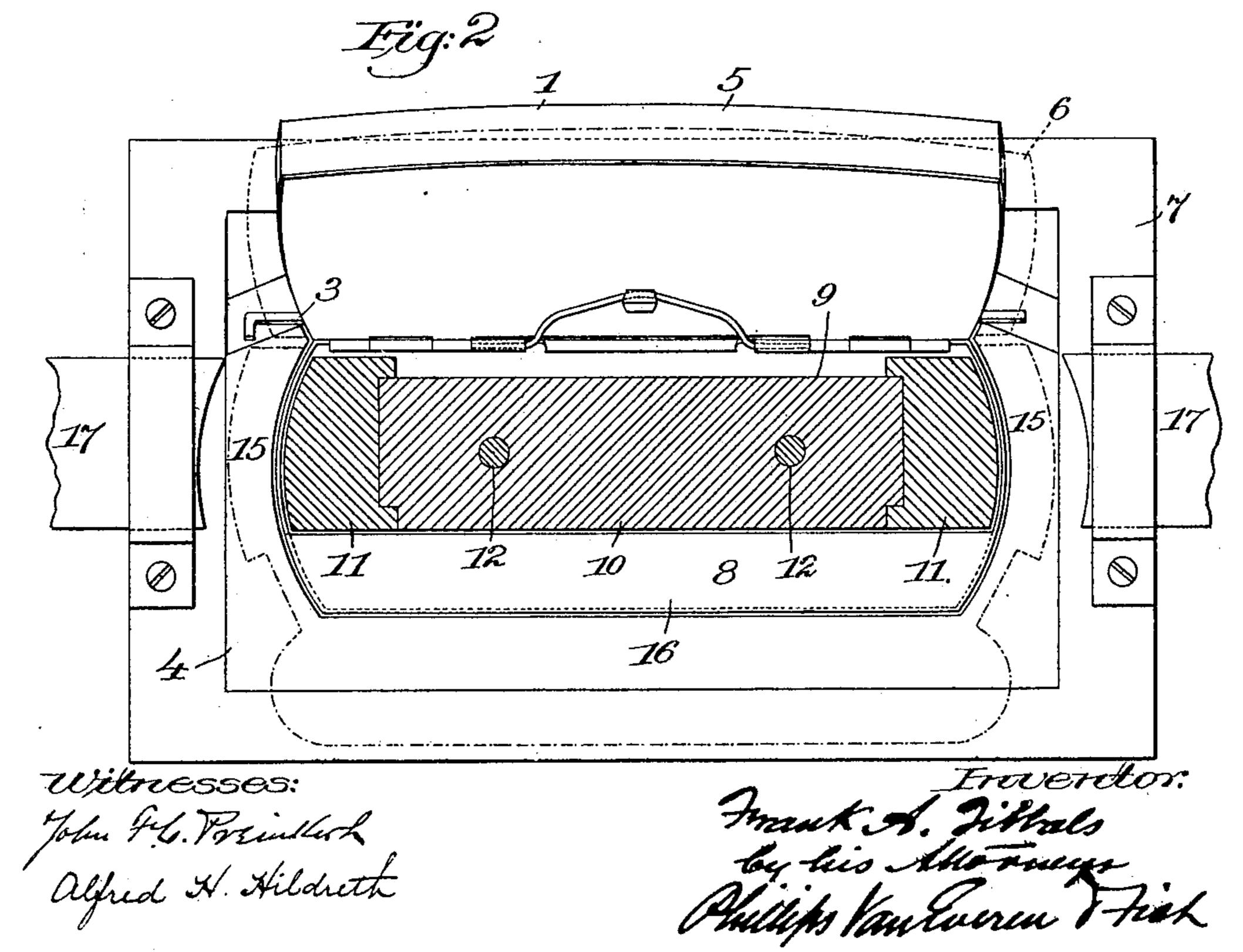
APPLICATION FILED JUNE 12, 1902.

906,579.

Patented Dec. 15, 1908.

2 SHEETS-SHEET 1.





F. A. TIBBALS.

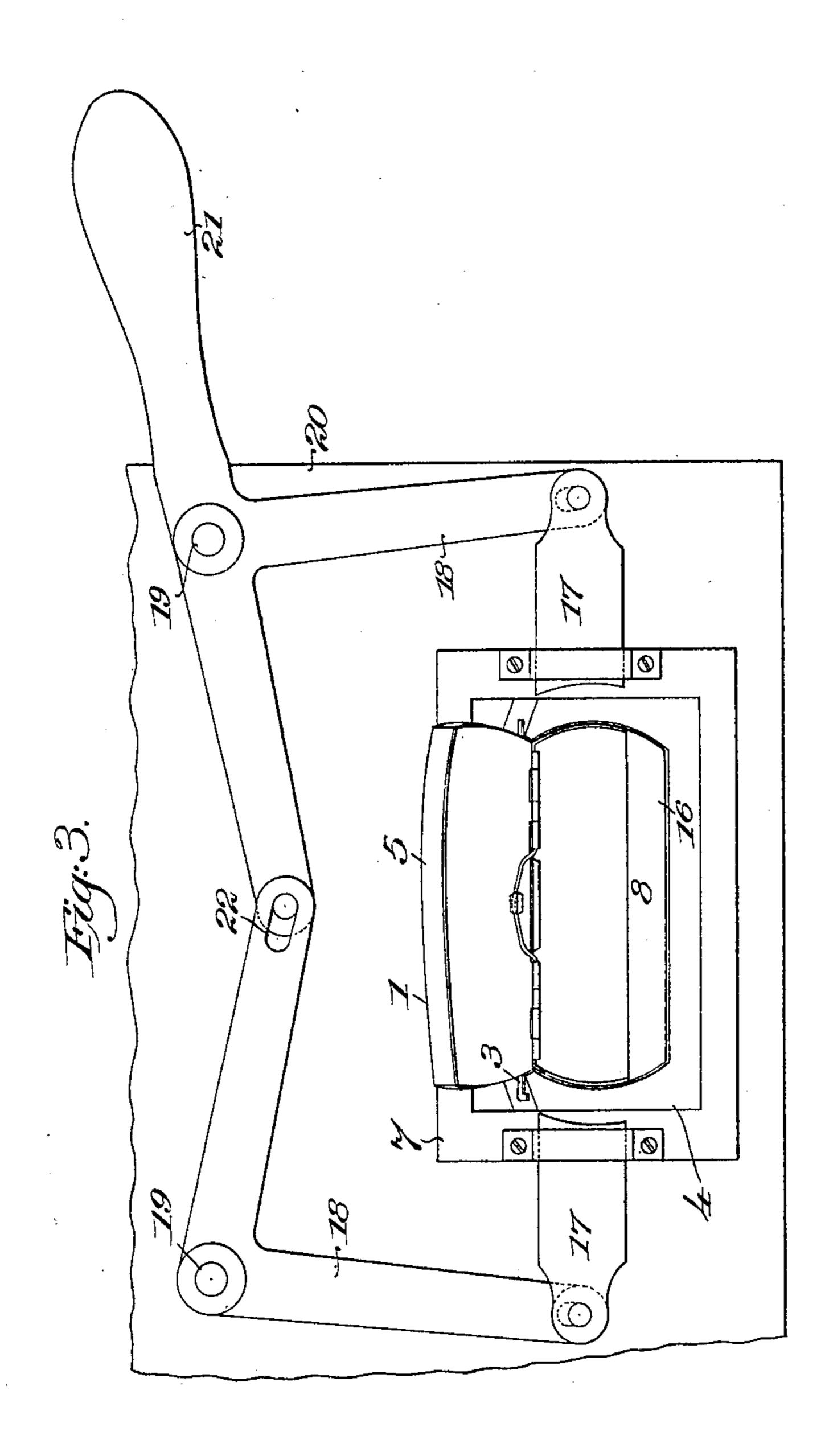
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UNITED STATES PATENT OFFICE.

FRANK A. TIBBALS, OF WEYMOUTH CENTER, MASSACHUSETTS, ASSIGNOR TO WILTON E. DRAKE, OF BOSTON, MASSACHUSETTS.

MACHINE FOR COVERING EYEGLASS-CASES.

No. 906,579.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed June 12, 1902. Serial No. 111,430.

To all whom it may concern:

Be it known that I, Frank A. Tibbals, a citizen of the United States, residing at Weymouth Center, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Machines for Covering Eyeglass-Cases; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to machines for covering eye-glass cases and more particularly to a machine for covering the outside of the box of eye-glass cases.

As eye-glass cases are now very generally constructed the case is made of sheet metal such as sheet iron, covered with leather and lined with plush. Heretofore the covering and lining of such cases have been, so far as I am advised of the state of the art, exclusively performed by hand, and the object of the

To the above ends the present invention consists in the devices and combinations of devices hereinafter described and claimed.

present invention is to produce a machine for

25 covering the box of such eye-glass cases.

In the accompanying drawings illustrating the preferred form of my invention, Figure 1 is a section of the die and side elevation of the coöperating plunger of a machine embodying my invention; Fig. 2 is a section on the line 2—2 of Fig. 1; and Fig. 3 is a plan of the base of my machine together with its appurtenant parts.

According to my invention I employ a form 1 shaped to receive the eye-glass case in its open position and to embrace and fit the 40 outside of such case. Such form is provided with a groove 2 shaped to receive a surplus material bending wire 3. The portion 4 of the form receives the box of the eye-glass case and the portion 5 receives the lid of the 45 same. The box portion 4 of the form preferably extends beyond the edges of the case while the lid portion 5 of the case has an outline corresponding to the outline of the lid. The covering material 6, cut to the proper 50 shape, is laid on the form 1 and the surplus material wire 3 is pressed down upon the covering material carrying the same into the groove 2, then the eye-glass case is laid on the form and the form is inserted in the plate 55 7 of the machine shaped to receive and posi-

tion said form with relation to the plunger, or if desired the form may first be laid in the press as illustrated in Fig. 1 and then the eyeglass case 8 is held by the operator against the plunger, indicated in a general way by 60 the reference character 9, while the latter descends to press the eye-glass case into the form. The plunger 9 consists of a main portion 10 and two auxiliary end portions 11, the main portion 10 being supported upon 65 studs 12 secured to the head 13 of the machine and normally held in the position illustrated in Fig. 1 by means of the springs 14. The auxiliary end plungers 11 are rigidly mounted upon the head 13 being conven- 70 iently shaped to embrace and support the main plunger 10 in the manner shown in Fig. 2.

The above-described arrangement is such that when the plunger descends the main 75 portion 10 of the plunger will first engage the inside of the bottom of the box of the eyeglass case and will press the box into the portion of the form shaped to receive it, the covering material or the outside of the box 80 having first been coated with some suitable cement or adhesive material. The box being made of rigid material is pressed into the form by the main plunger 10 and into intimate contact with the covering material 6 85 which is closely pressed into engagement therewith and smoothly secured thereto. The covering material 6 then extends up substantially vertically at the edges of the box and the end portions 15 of the covering ma- 90 terial indicated in outline in dash and dot lines in Fig. 2 are then in position to be bent over the edges of the box. At this time the covering material which is provided to cover the lip 16 of the box is not operated upon, 95 but means, such as wipers 17, are employed to bend the portions 15 of the covering material over the ends of the box giving such portions an initial bend, which, when the wipers 17 are withdrawn, remain inclined up- 100 ward and inward extending over the inside of the box.

Any convenient means for operating the wipers may be employed, such as bell crank levers 18 pivoted at 19 to the base 20 of the 105 machine, which may be conveniently operated by the lever 21 secured to one of the bell crank levers, the inwardly extending portions of the bell crank levers being pivotally connected together in any suitable manner, as by 110

906,579

the pin and slot connection 22. The wipers having been moved inwardly to bend the edges of the covering material over the edges of the box and again withdrawn the auxil-5 iary plungers 11 are caused to descend and engage such inwardly projecting edges of the covering material forcing the same downwardly into engagement with the inside of the ends of the box, securely pressing them 10 thereagainst and attaching them thereto, it being understood that during the time the wipers are being moved to give the initial bend to the edges of the covering material, the main plunger 10 stands in engagement 15 with the box holding the covering material

and box firmly together.

It is to be observed that my improved form in which the covering material is laid, while it is especially adapted for use in con-20 nection with this machine is susceptible of being employed apart therefrom and especially in connection with the machine illustrated in Letters Patent No. 821,900 for machine for covering eye-glass cases, dated May 25 29, 1906, which is especially designed for covering the lids of eye-glass cases by the use of this form, the lid receiving portion of the form being adapted to enter and descend in a recess shaped to fit it so as to bend upward 30 the edges of the covering material extending beyond the edges of the lid. Some of the claims, therefore, are directed to a form that can be used both in the machine of the present application and in the machine of my co-35 pending application above referred to.

It is also to be noted that the machine of the present invention need not necessarily be provided with a surplus material groove 2 although I prefer to provide it with such

40 groove.

My invention is not limited to a construction in which wipers are employed as it is susceptible of embodiment in a machine in which the cavity for receiving the eye-glass 45 case is made deeper than the box and in which the auxiliary plungers, or the parts which correspond thereto, so fully occupy the space inside of the upwardly extended walls of the cavity as upon their descent to 50 engage and alone, not only bend over the covering material, but press it down inside of the box. The present construction may be employed in this manner by moving the wipers inwardly until their edges correspond 55 with the edges of the cavity in the form, whereupon upon the descent of the box into the cavity of the form the edges of the covering material will be turned up and will be supported in such upturned position by such 60 wipers, thereupon, upon the descent of the auxiliary plungers 11 the covering material will be bent over into the box and by such auxiliary plungers will be pressed into engagement with the inside of the same and se-65 curely affixed thereto.

My invention is not limited to the covering of eye-glass cases but may be advantageously employed in the covering of other things with flexible material, and therefore, in the claims, except where specifically limited 70 thereto by the setting forth of details of construction, I have not limited myself to the covering of eye-glass cases.

Having thus described my invention, I claim as new and desire to secure by Letters 75

Patent of the United States.

1. A covering machine, having, in combination, a form for receiving the article to be covered, a plurality of plungers arranged to engage the interior of the article and press 30 the covering material thereagainst, and a head for actuating the plungers, one of the plungers being normally in advance of the others and having spring connection with the head so as to yield after engaging the 85 article so as to permit the other plungers to be moved into engagement by the continued movement of the head, substantially as described.

2. A covering machine, having, in com- 90 bination, a form for receiving the article to be covered, a main plunger, an auxiliary plunger, a head by which the plungers are actuated, and wipers for bending over the edge of the covering material, the main 95 plunger being arranged in advance of the auxiliary plunger and connected with the head by a spring so as to yield after engaging the article to be covered, substantially as described.

3. A form for use in covering eye-glass cases having portions shaped to conform to the exterior of the lid and the box of the case, the box receiving portion and the lid receiving portion being arranged at an angle 105 with one another so as to receive the case in its normal open position, substantially as described.

4. A form for use in covering eye-glass cases, having, in combination, a lid-receiving 110 portion and a box-receiving portion arranged at an angle one with the other and a groove between the said portions to receive a fold of surplus material, and a wire for depressing the material into the groove, substantially 115 as described.

5. A machine for covering eye-glass cases, having, in combination, a member to receive the covering material provided with a groove, a wire for pressing the covering material into 120 the groove, and a plunger for pressing the eye-glass case into the case-receiving member, substantially as described.

6. A machine for covering eye-glass cases, having, in combination, a case receiving 125 member, a plunger for engaging the central part of the bottom of the case to press it into the said member, and auxiliary plungers arranged to engage the bottom of the case on either side of the main plunger so as to 130

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906,579 8

affix the portions of the covering material bent over the edge of the case, substantially as described.

7. A machine for covering eye-glass cases, 5 having, in combination, a case-receiving member, a plunger for engaging the central part of the bottom of the case to press it into the said member, wipers for bending over the edges of the covering material, and auxiliary 10 plungers engaging the bottom of the case on either side of the main plunger so as to affix the bent-over portions of the covering mate-

rial, substantially as described.

8. A machine for covering eyeglass cases, 15 having, in combination, a case-receiving member, a head, a spring-pressed plunger carried by the head and arranged to engage the central part of the bottom of the case to press the case into the case-receiving mem-20 ber, wipers for bending over the edges of the covering material, and auxiliary plungers rigidly mounted on the head and arranged to engage the bottom of the case on either side of the main plunger so as to affix the bent-

over portions of the covering material, sub- 25

stantially as described.

9. A machine for covering eyeglass cases having, in combination a case-receiving member, a plunger for pressing a case against a sheet of covering material on said member, 30 and means for securing slack covering material at the hinge portion of the casing, substantially as described.

10. A machine for covering eyeglass cases having, in combination, a case-receiving 35 member, a plunger for pressing a case against a sheet of covering material on said member, and means for bending the covering material at the hinge portion of the case to form and secure a fold of material sufficient to permit 40 the case to be closed, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses.

FRANK A. TIBBALS.

Witnesses:

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HORACE VAN EVEREN, ALFRED H. HILDRETH.