

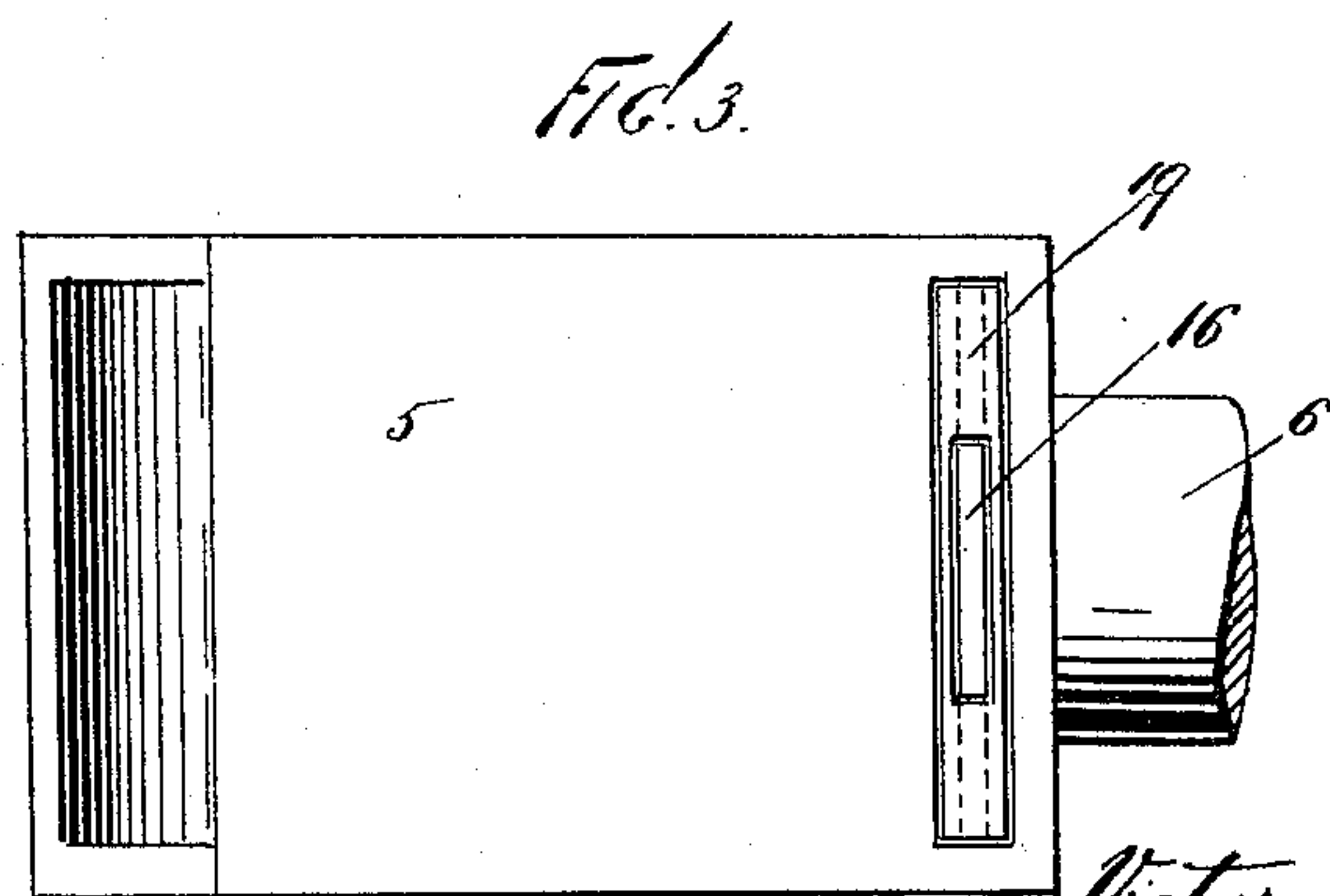
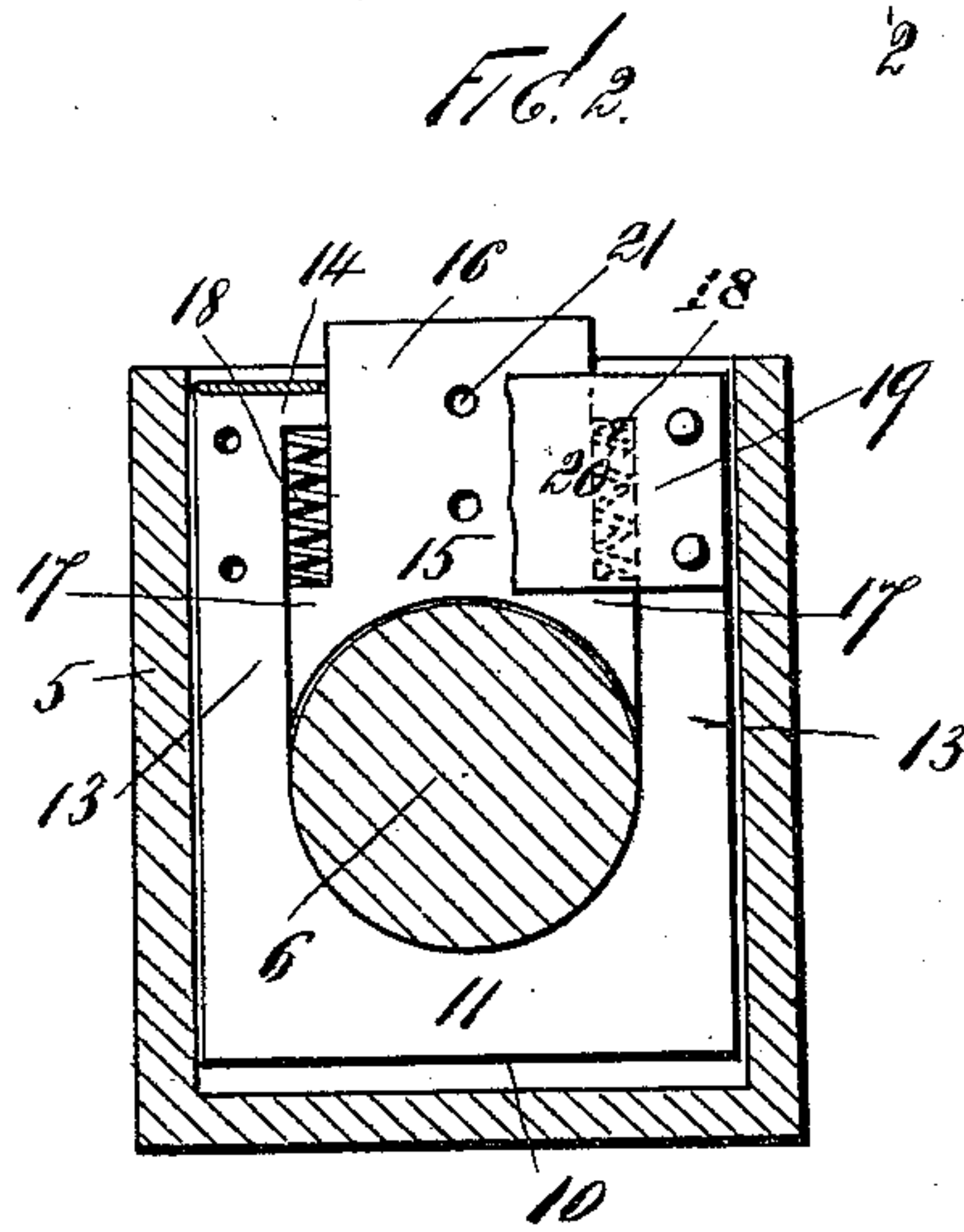
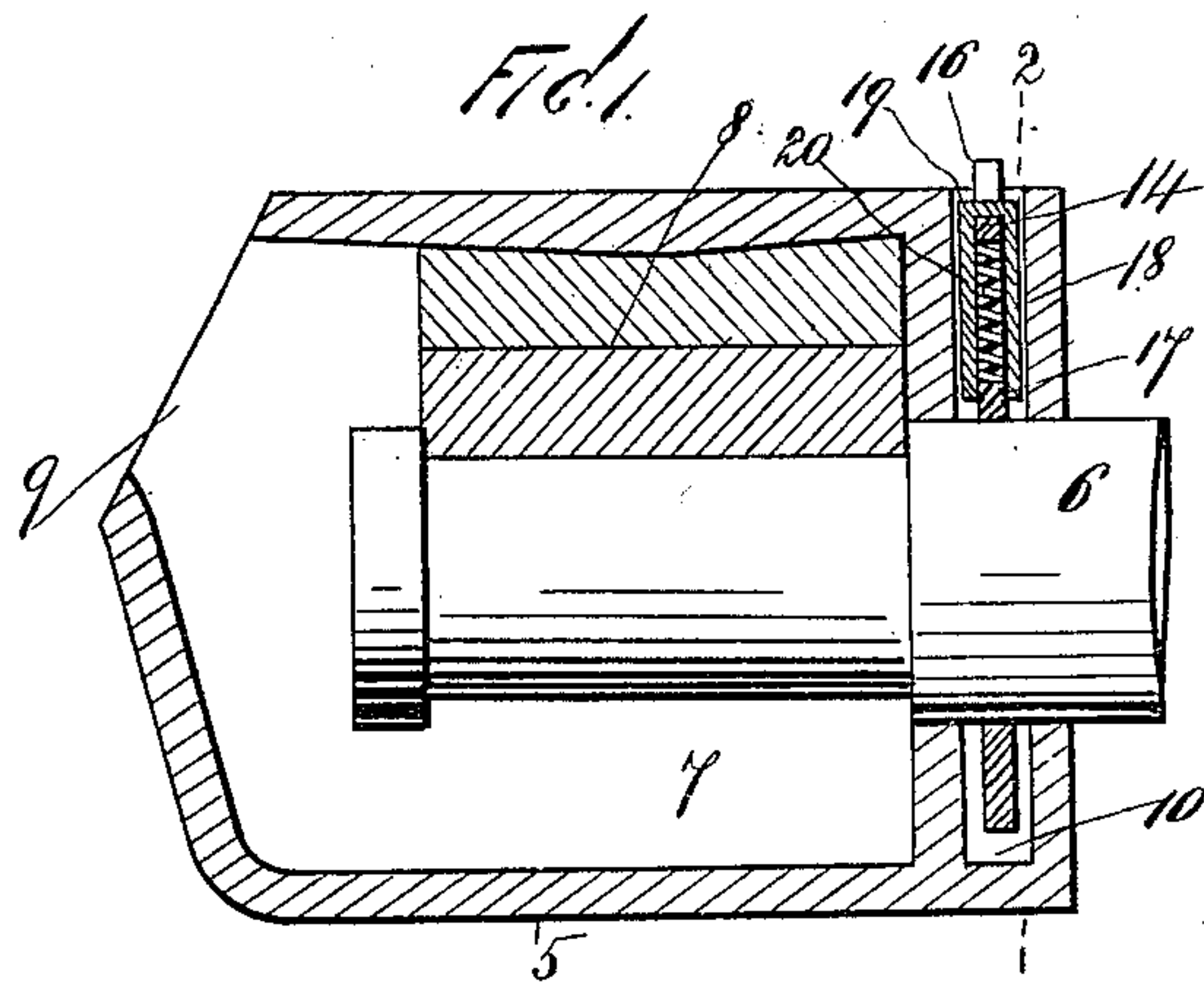
No. 610,571.

Patented Sept. 13, 1898.

V. WIGELIUS.
JOURNAL BOX.

(Application filed July 28, 1897.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

VICTOR WIGELIUS, OF SCOTIA, CALIFORNIA.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 610,571, dated September 13, 1898.

Application filed July 28, 1897. Serial No. 646,216. (No model.)

To all whom it may concern:

Be it known that I, VICTOR WIGELIUS, a citizen of the United States, residing at Scotia, in the county of Humboldt and State of California, have invented certain new and useful Improvements in Journal Boxes or Bearings, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

My invention relates to journal-boxes, and has for its object the production of a box of the above class which will retain the oil and packing material therein in such manner as will prevent an accumulation of gum on the axle, occasioned by said contents working out between the periphery of said axle and the opening in the journal-box. This escape of oil results in a substantial loss of lubricating material and in the clogging of the journal with dirt, dust, and other gritty substances.

A further object of the invention is to provide a journal-box which will satisfactorily accomplish the above results, while being simple in construction and inexpensive to manufacture.

The invention consists in the novel features of construction hereinafter set forth and described, and more particularly pointed out in the claim hereto appended.

Figure 1 is a longitudinal vertical section of a journal box or bearing and showing one end of a shaft or axle and my improvement connected therewith. Fig. 2 is a sectional elevation of the journal-box, exposing the auxiliary chamber and its contents to view, the cap thereof being partly broken away; and Fig. 3 is a top plan view.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings I have shown at 5 an ordinary journal box or bearing and at 6 a shaft or axle which passes therinto, and said shaft or axle is provided with the usual spindle 7 and with brasses or bearings 8, which are mounted thereon and held in position by the journal-box, all these features being of the usual construction and forming no part of this invention. The journal-box is provided at its

outer end and at the upper side thereof with the usual opening 9, through which the packing, oil, and other material is passed. The inner end of said box or casing is provided with a chamber which is open at one side thereof and preferably upwardly. The parallel walls of the journal-box proper and of the chamber 10 are provided, respectively, with circular openings in which is mounted the axle 6.

Within the chamber 10 is a plate 11, having a circular depression therein, and side extensions 13, which at their upper ends are provided with inwardly-directed projections 14.

Mounted upon the axle 6, between the vertical extensions 13 of the plate 11, is a vertically-movable plate 15, which presents downwardly a curved bearing-surface adapted to engage the axle. This surface is adapted to closely fit about and correspond in configuration with the cross-section of the axle 6 to prevent the separation of said parts and resulting crevices, through which dust may enter and oil escape. The plate 15 is provided with an upwardly-directed extension 16 and with shoulders or projections 17 on opposite sides thereof, which are substantially parallel with the inwardly-directed extension 14.

Between the shoulders on the plate 15 and the projections 14 of the plate 11 or the extensions 13 thereof are expansive spiral springs 18, which simultaneously act on said plates to compress the upper and lower curved surfaces thereof, respectively, in intimate contact with the axle and prevent the jar of travel or disarranging these parts. These springs are held in place and protected by a cap 19, having downwardly-directed side plates 20, which inclose said springs, by means of which extensions said cap is bolted or otherwise securely attached to the upwardly-directed extensions of the plate 11. The side plates 20 of the cap 19 inclose the springs 18 and prevent dust, dirt, and other material from reaching them, and the upwardly-directed extension 16 of the plate 15 passes through said cap and is provided with holes or openings 21, by means of which the plate 15 may be raised against the operation of the spring 18 by inserting a hook or other instrument therinto.

The chamber 10, in which the plate 11 is mounted, is closed at all points except at the

top, and it will thus be seen that the oil or packing material in the journal-box 5 cannot escape entirely from said box, as said oil or other material would drop into the bottom of the chamber 10 if it should succeed in passing in the inner wall of said chamber, and it will also be seen that dust, dirt, and other material will be prevented from entering the journal-box through the opening in the outer wall of said chamber 10, this result being accomplished by the axle 6, the plate 11, and the plate 15, which rests on said axle.

The inwardly-directed projection 14, against which the upper ends of the springs 18 bear, is not absolutely essential, and said spring may be held in place by the cap 19, and other changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its advantages.

The journal-box or oil-box is of the standard form used in this country, and my improvement is particularly adapted for use in connection therewith, and it will thus be seen that I accomplish the object of my invention by means of a device which is simple in construction and operation and perfectly adapted to produce the result for which it is intended.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

In a journal-box, a chamber open on one side and having openings in the parallel walls thereof for the axle, a plate mounted in said chamber having an opening adapted to partially encompass the axle provided with upwardly-directed extensions thereon, and inwardly-directed projections on said extensions, an auxiliary plate presenting downwardly a curved surface adapted to partially encompass said axle, and having an extension thereon, and shoulders thereon on a substantially parallel plane with the above-mentioned projections, springs seated between said shoulders and said projections whereby both of said plates are held constantly in intimate contact with said axle, and a cap rigidly attached to the extensions on the first-mentioned plate whereby the clogging of said spring is prevented, said cap being provided with an opening to admit of a vertical movement of said auxiliary plate, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 19th day of July, 1897.

VICTOR WIGELIUS.

Witnesses:

A. D. ENOS,
HOWARD M. SMITH.