

(No Model.)

N. S. CLEMENT.
LOCK HINGE.

No. 494,549.

Patented Apr. 4, 1893.

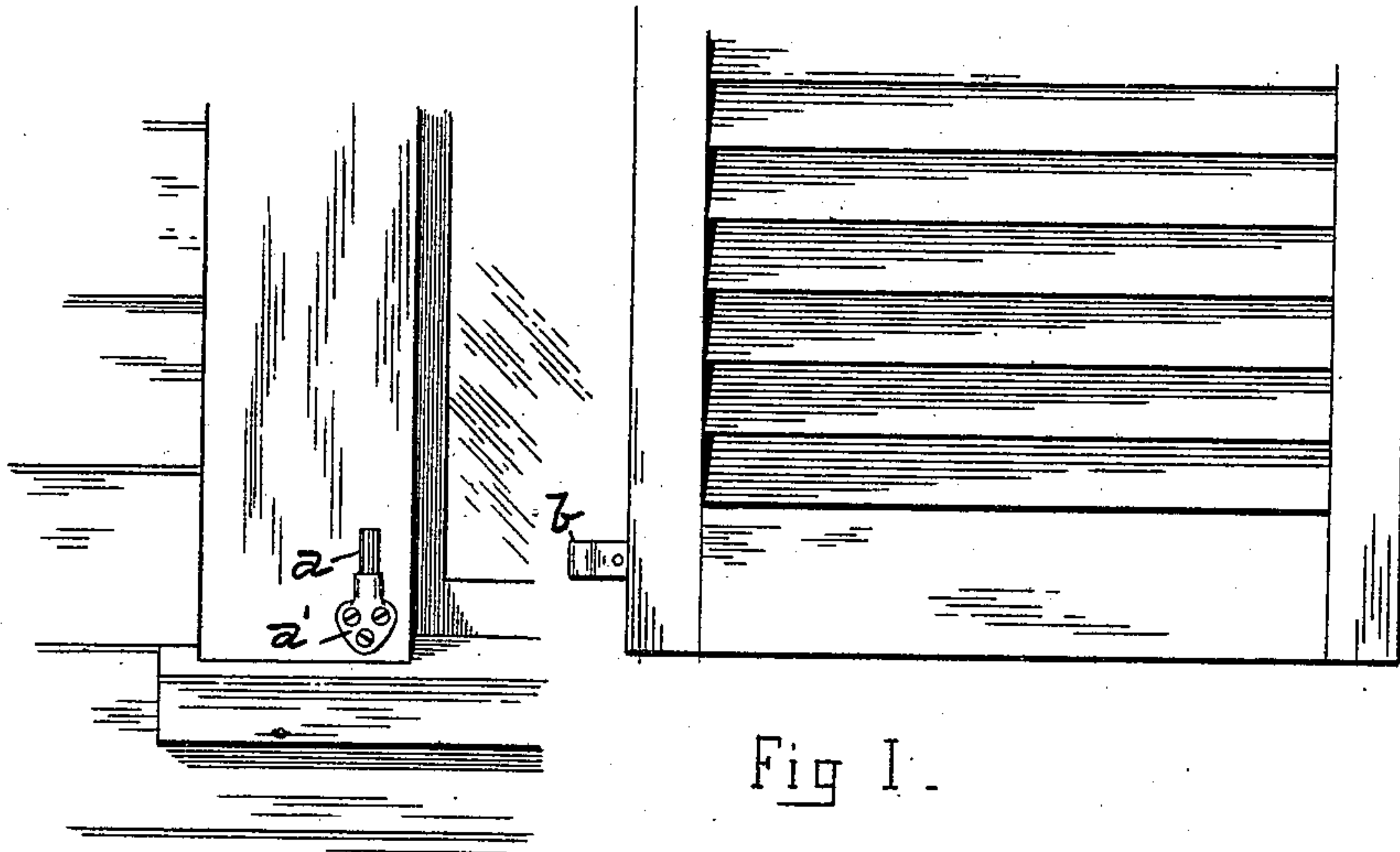


Fig 1.

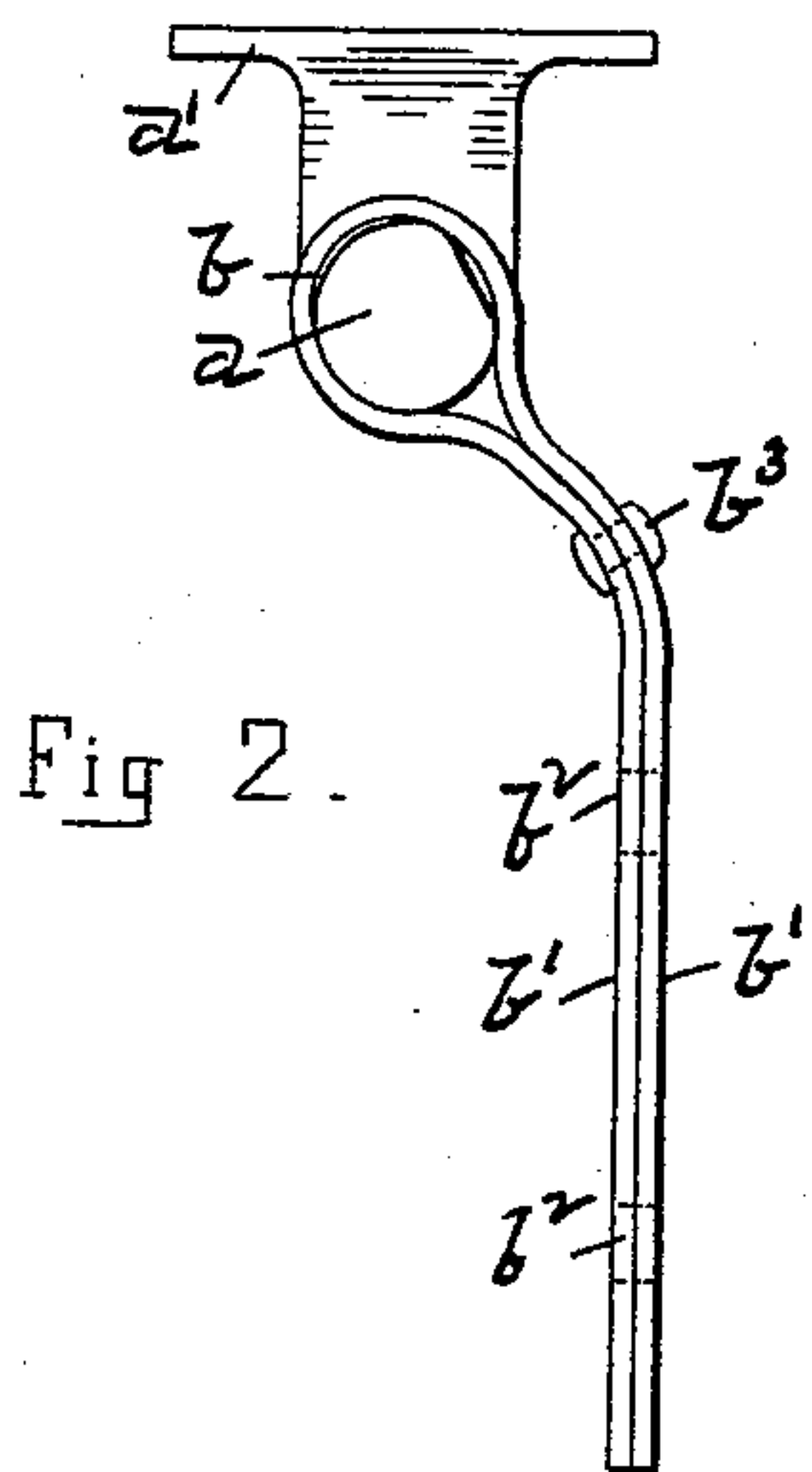


Fig 2.

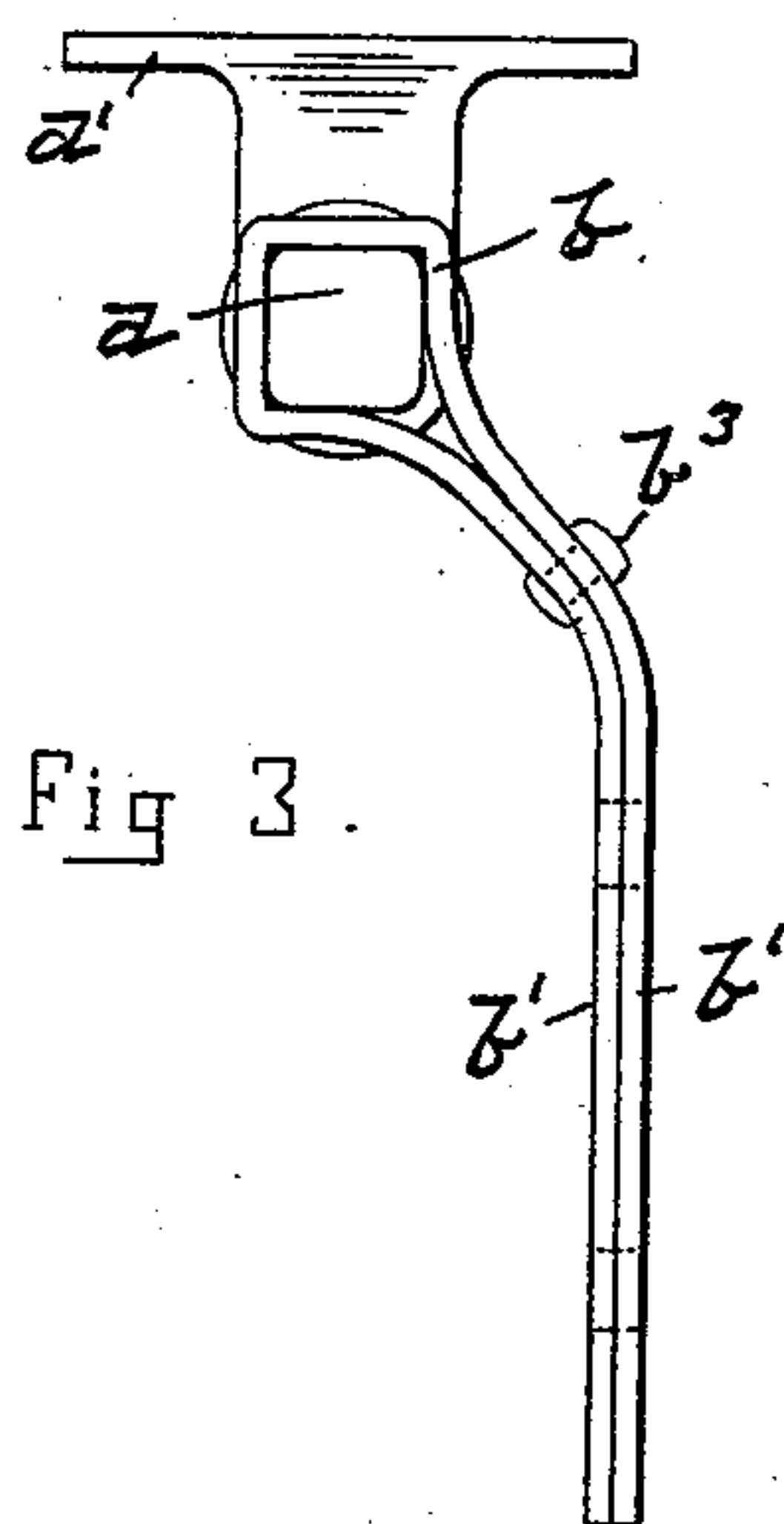


Fig 3.

WITNESSES:

F. W. Rice.
J. E. Chapman

INVENTOR

N. S. Clement
BY James Chapman
ATTORNEYS.

UNITED STATES PATENT OFFICE.

NATHAN S. CLEMENT, OF NORTHAMPTON, MASSACHUSETTS.

LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 494,549, dated April 4, 1893.

Application filed June 18, 1892. Serial No. 437,160. (No model.)

To all whom it may concern:

Be it known that I, NATHAN S. CLEMENT, a citizen of the United States, residing at Florence, Northampton, in the county of Hampshire and State of Massachusetts, have invented a new and useful Improvement in Hinges, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

10 The object of my invention is to provide a hinge which will have a spring, frictional engagement of its movable member with its fixed member, whereby a window-blind or other object carried by its movable member will be
15 securely held against accidental movement, and which, at the same time, will be simple and inexpensive in construction, and capable of being quickly and easily placed in position for use.

20 To this end, my invention consists in the hinge constructed and operating as hereinafter fully described and particularly pointed out in the claim.

Referring to the drawings, in which like letters designate like parts in the several views, Figure 1 is a view of a portion of a window casing and its blind, having applied thereto a hinge embodying the invention. Fig. 2 is a plan view of the hinge. Fig. 3 is a similar
30 view of a slightly modified form of the hinge.

The hinge devised by me is composed of a pintle *a*, and a spring eye or loop *b*, which is adapted to embrace said pintle with a yielding pressure. As herein shown the pintle *a*
35 is provided with a base *a'* containing screw holes, to enable it to be securely fastened to a window casing or other support, said base being offset from the pintle as shown in Fig. 2 to secure the necessary degree of separation
40 between the pintle and its support. The eye or loop *b*, which is preferably composed of tempered spring-steel, is formed by bending a strip of sheet steel, at a point between its ends, to the shape required for the eye or loop,
45 the two ends of said strip being then laid together to form leaves *b'*, through which are made holes *b²* to receive the screws by which this member of the hinge is secured to the window-blind or other object. The two leaves
50 *b'* will be made straight, from the eye or loop *b* to their outer ends, or will be curved at some point in their length, as may be required to

adapt them for the particular use to which the hinge is put. For use on window-blinds, they will preferably be curved substantially as
55 shown in Figs. 2 and 3, whereby they are adapted for use upon either blind without change and obviating the necessity of making them in the form of "rights" and "lefts" as is customary in blind hinges. I prefer to
60 firmly connect the leaves *b'* together near the eye or loop *b* by means of a rivet *b³*, and thereby preserve the spring action of said eye or loop under all circumstances. As shown in Fig. 2 the eye or loop *b* forms a substantially
65 true circle except at the point where the leaves *b'* join the same, and to enable said eye to be readily applied to and withdrawn from the pintle *a*, the latter is slightly "spotted" or flattened at one side as shown. It results
70 from this construction that said eye will embrace said pintle with a spring pressure, as the eye is revolved about the pintle as a center, except at the two points in the revolution of the eye when the spotted or flattened por-
75 tion of the pintle is brought into substantial alignment with one of the leaves *b'* at the point where said leaf joins said eye, at which points the expansive pressure of the pintle upon the eye is relieved, and the latter is free
80 to be withdrawn from the former. As the eye, in the ordinary use of the hinge, makes but a half-revolution about the pintle, such free point occurs but once in such movement, and the blind or other object is therefore held
85 against accidental movement, by the elastic, frictional engagement of the eye with the pintle throughout its entire range of movement except at this one point. Window-blinds are
90 thus held from being thrown open or shut by the wind, and the necessity for employing other fastening devices to hold them in either their open or closed positions is obviated.

The particular shape of the pintle and eye, in cross-section, can be variously modified
95 without materially changing their joint action as just described, and within the spirit of my invention. For example, I have shown in Fig. 3 a form of the invention in which the pintle is substantially rectangular in cross-section,
100 with slightly rounded corners, and the eye is of a corresponding shape. The only difference between the action of this form and that first described is, that in a single revolution

of the eye about the pintle the eye would have
four "free points," at which it could be read-
ily withdrawn from the pintle, instead of two
but between such points the action of the two
5 forms is identical. In the same manner, the
pintle can be provided with a greater or less
number of flattened sides without materially
affecting the action thereof with the spring
eye. For use on window-blinds, however, I
10 prefer the form first described because of its
capacity for securely holding the blind against
movement at any point of its throw, except at
the one "free point" the particular location of
which can be varied as may be desired. It will
15 be observed that, with this form of hinge, no
trouble is encountered in hanging a window
blind or in removing the same from a building,
it being necessary merely to swing it to the
proper angle to the building to move the eye b
20 to its "free point," when the blind can be low-
ered upon the two pintles or raised therefrom

with perfect ease. While it is thus rendered
particularly applicable for use as a blind hinge,
it will be obvious that the hinge devised by
me is adapted to be used for any of the pur- 25
poses for which hinges generally are used.

Having thus fully described my invention,
what I claim, and desire to secure by Letters
Patent, is—

A hinge composed of two members, one of 30
which consists of a pintle having one or more
sides thereof "spotted" or flattened, and the
other of which consists of an eye or loop of
spring metal adapted to embrace said pintle
with a yielding pressure and having means 35
whereby it can be secured to a window-blind
or other object, substantially as described.

NATHAN S. CLEMENT.

Witnesses:

W. H. CHAPMAN,
J. E. CHAPMAN.