

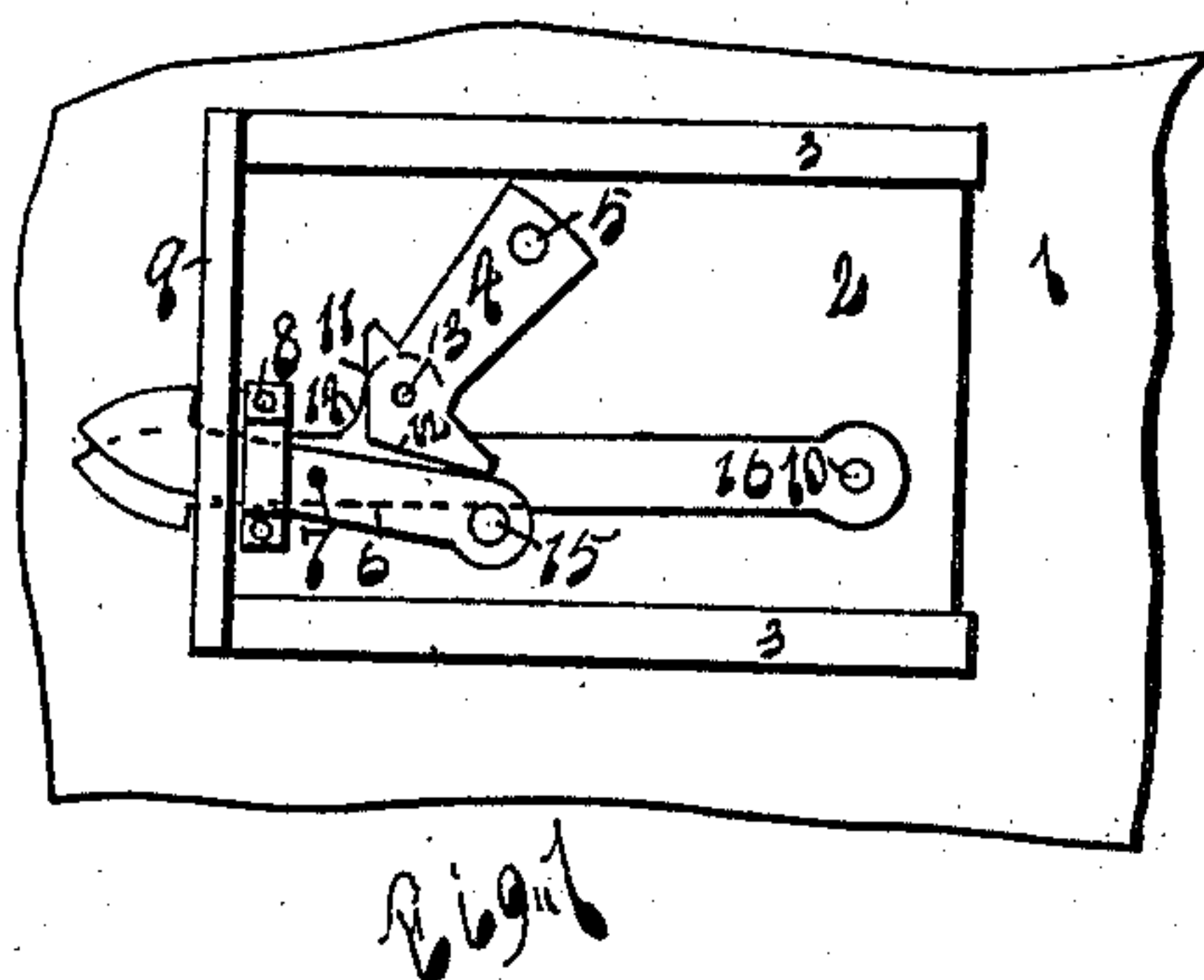
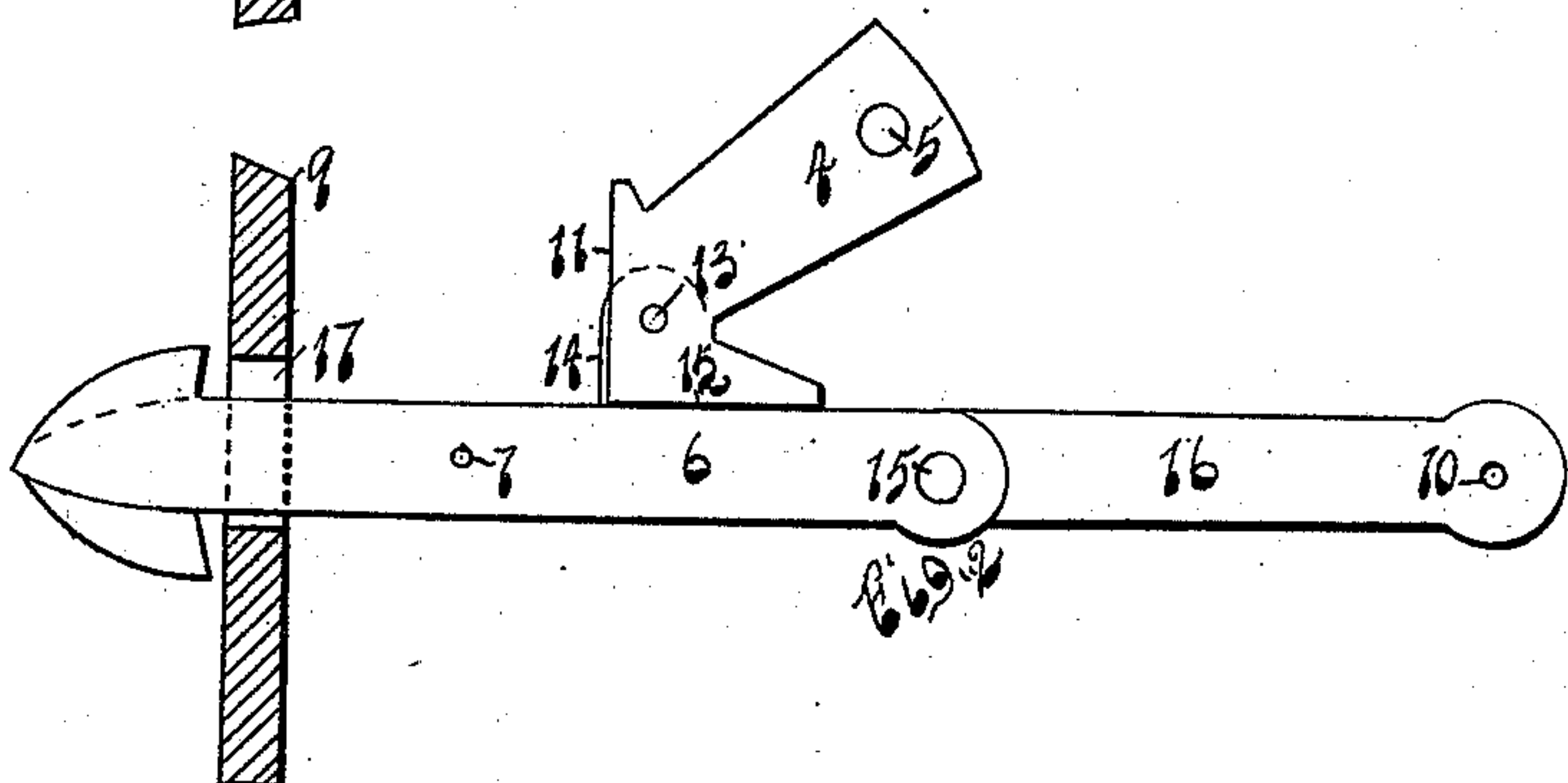
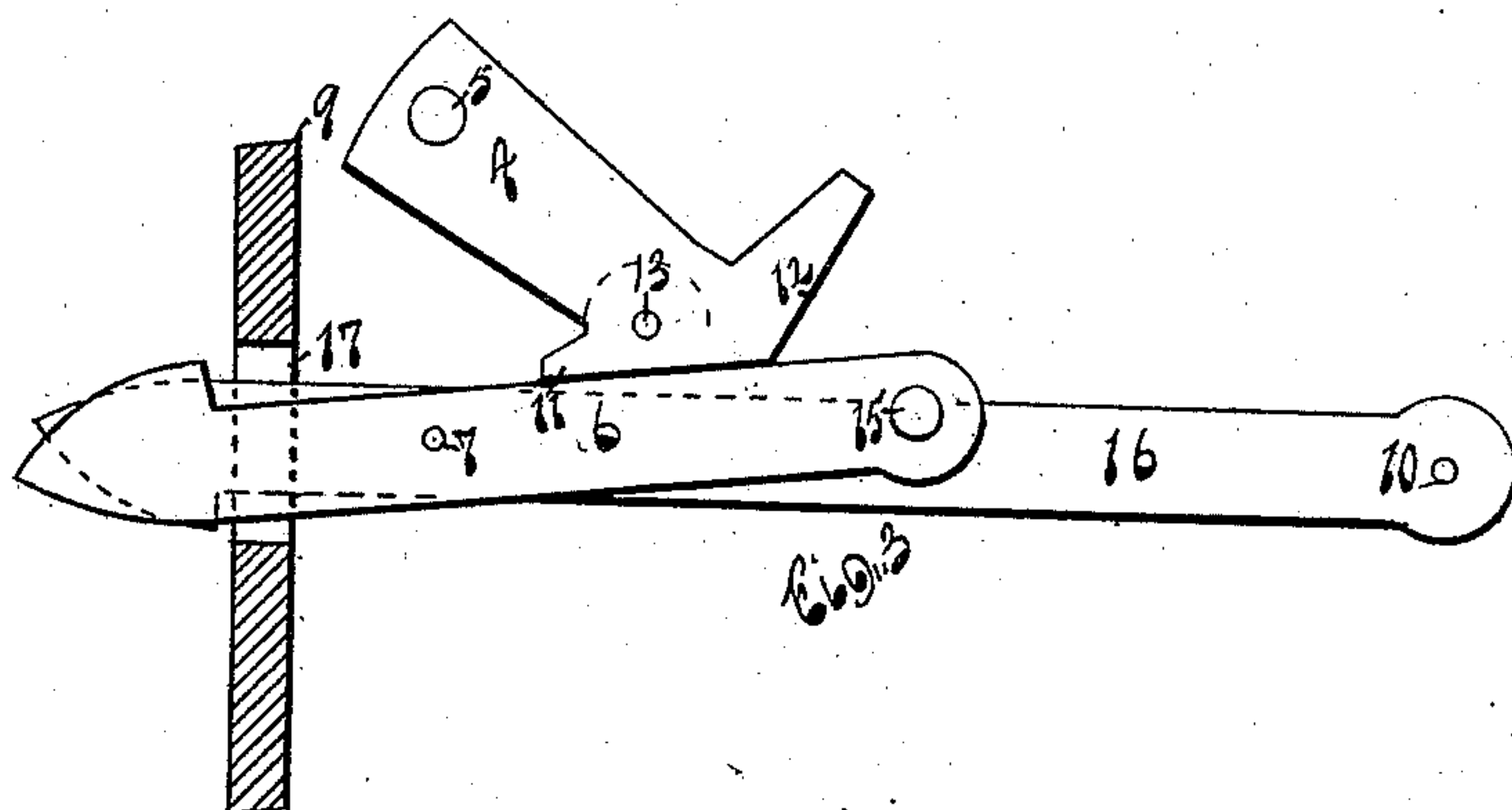
(No Model.)

2 Sheets—Sheet 1.

H. P. COPE.
LATCH FOR STOVE DOORS.

No. 365,730.

Patented June 28, 1887.



Witnesses
C. M. Mason
Geo. H. Lothrop

Inventor
Henry P. Cope
By his Attorney
Geo. H. Lothrop

(No Model.)

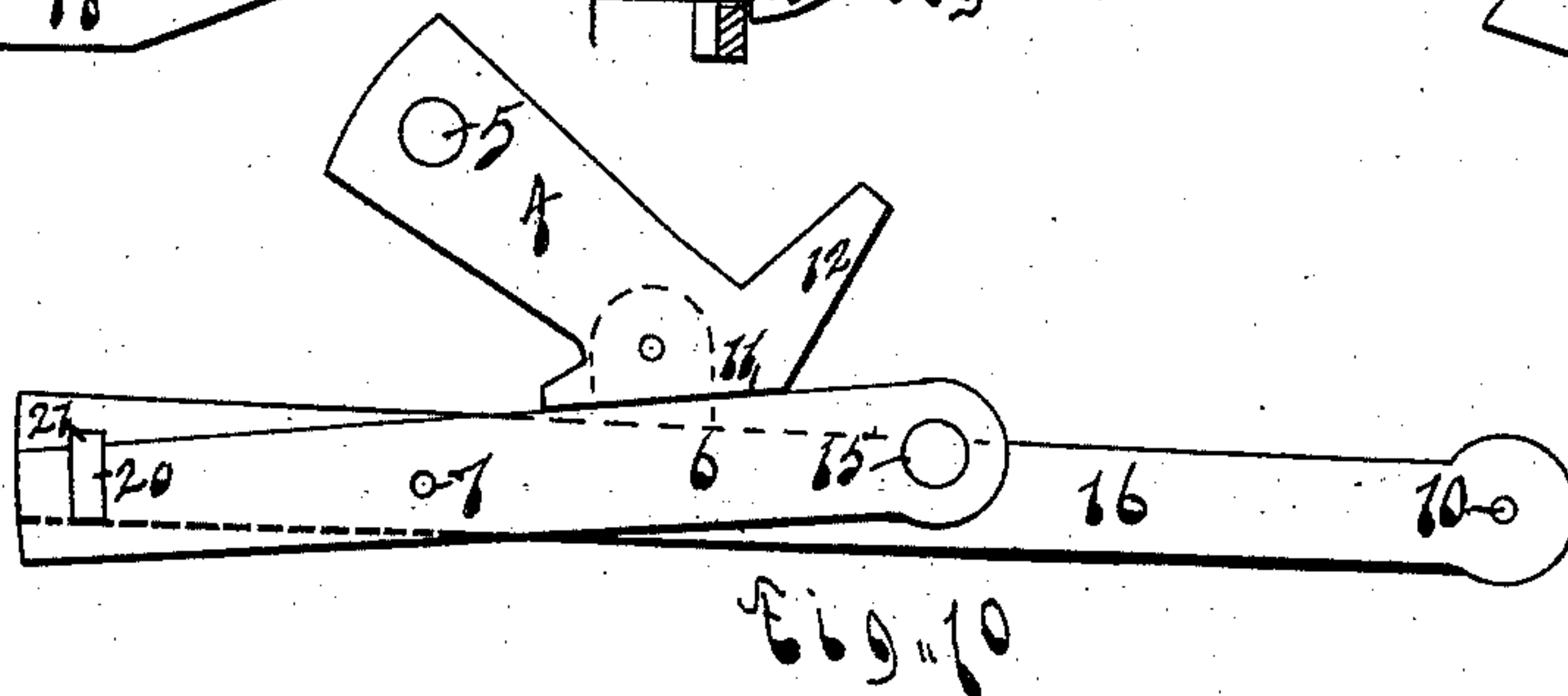
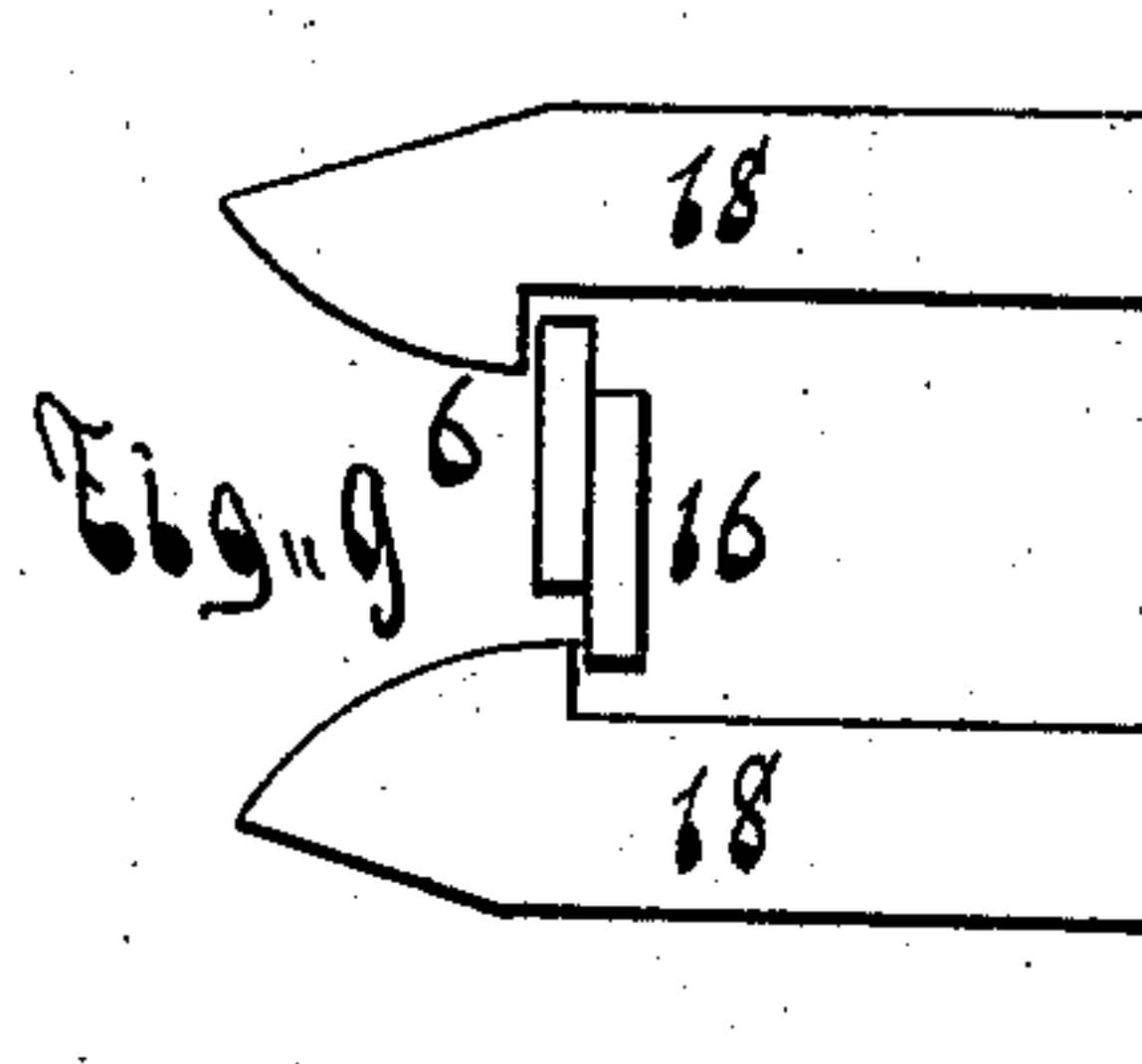
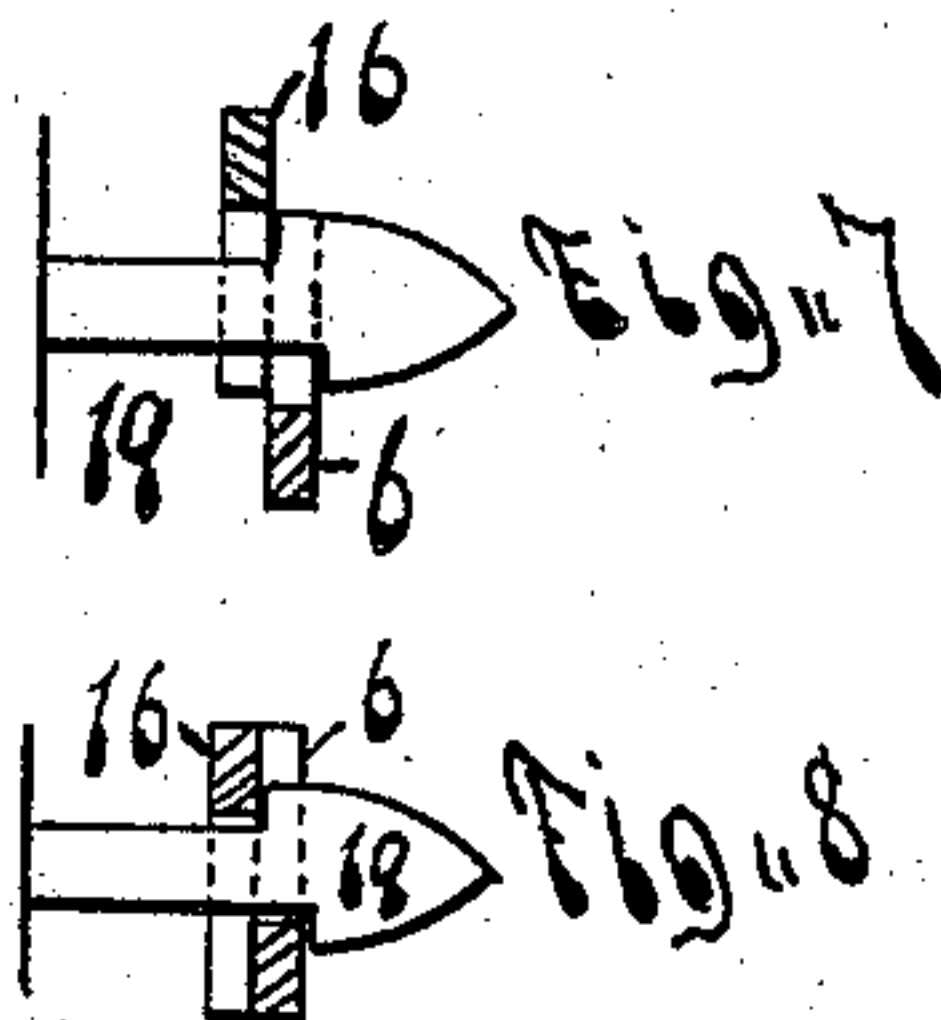
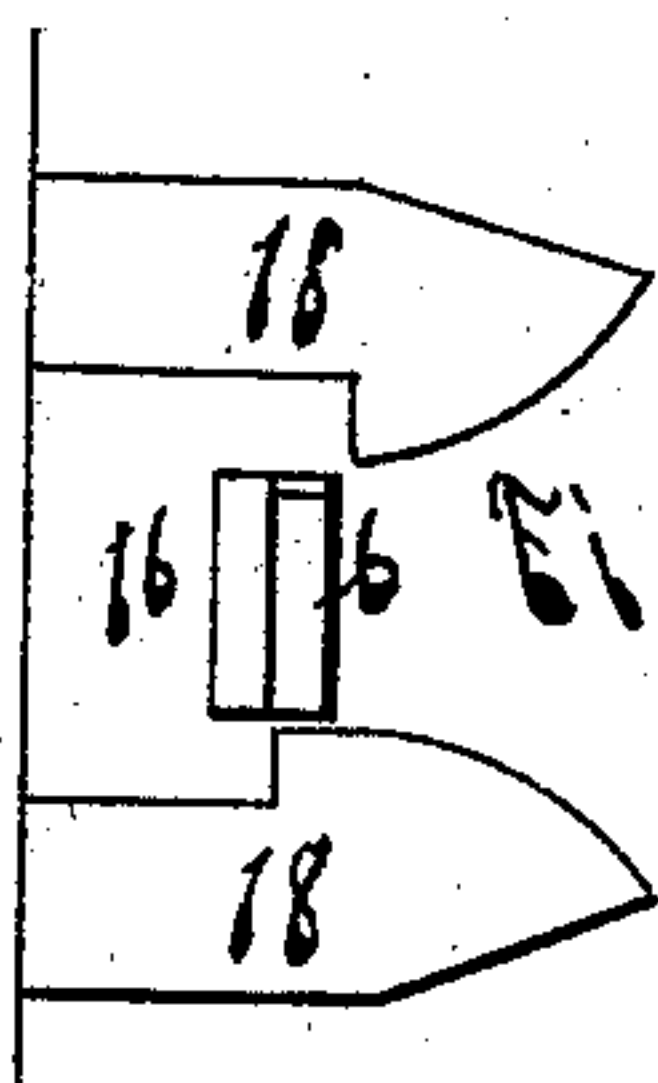
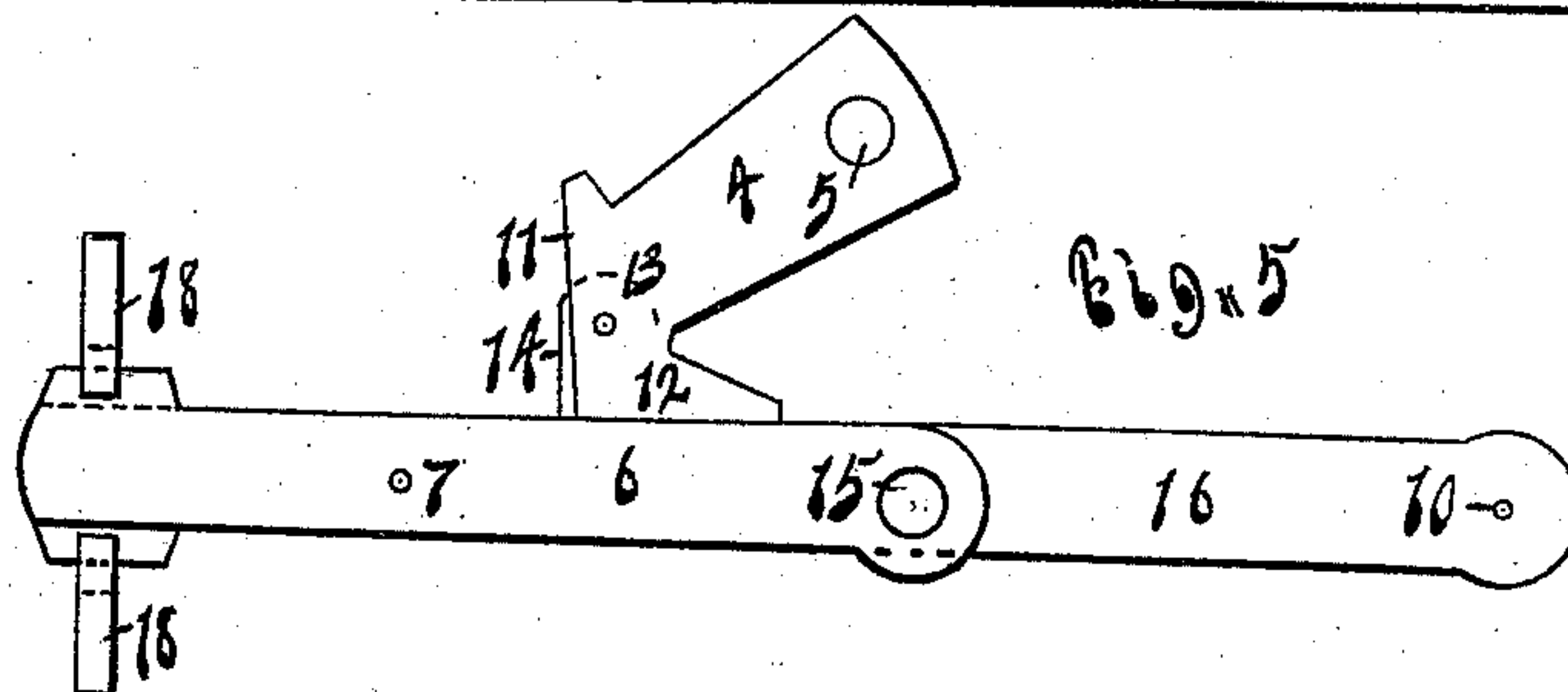
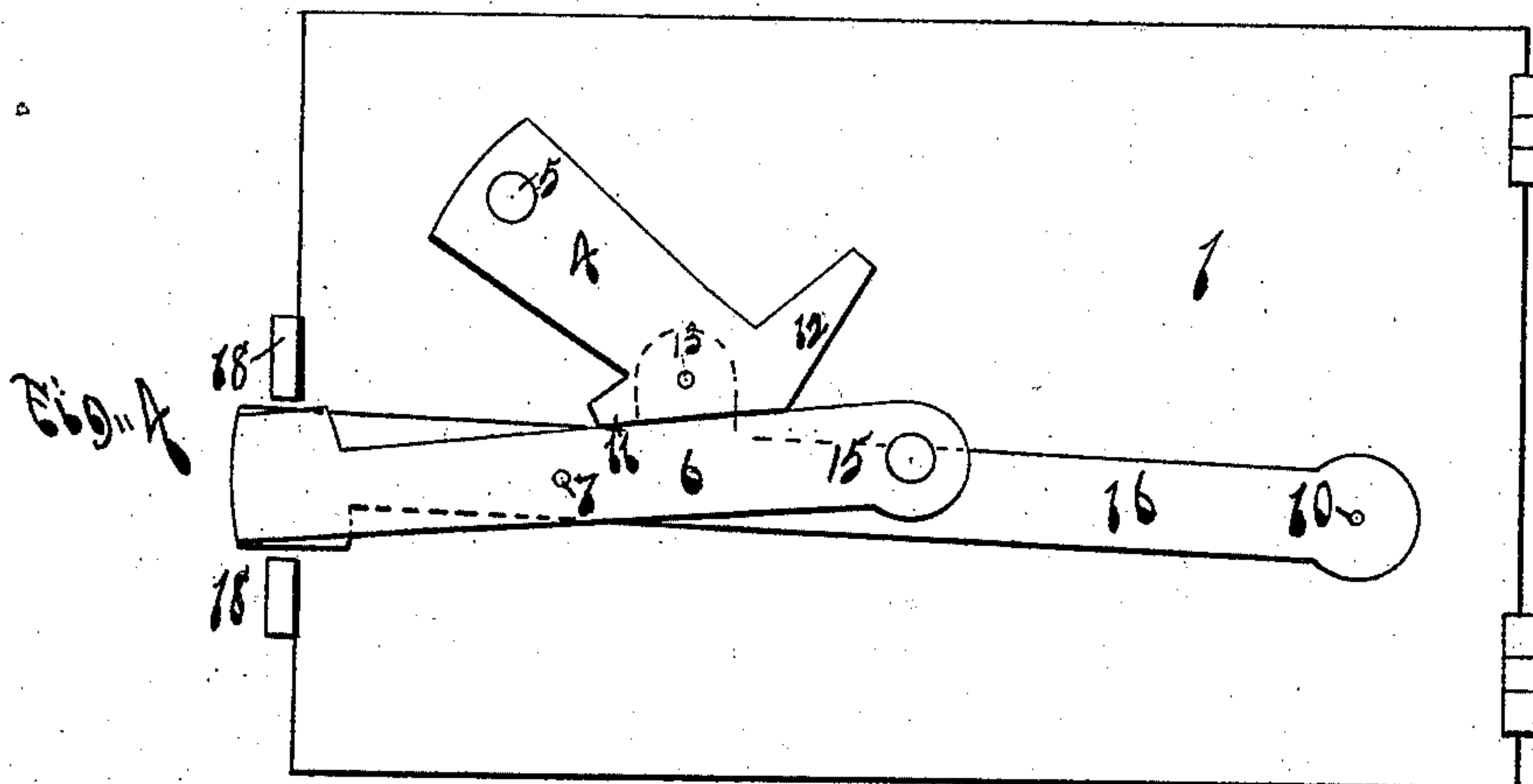
2 Sheets—Sheet 2.

H. P. COPE.

LATCH FOR STOVE DOORS.

No. 365,730.

Patented June 28, 1887.



Witnesses

C. M. Mayory
Geo. H. Lothrop

Inventor

Henry P. Cope

By His Attorney

Geo. H. Lothrop

UNITED STATES PATENT OFFICE.

HENRY P. COPE, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO
JOHN H. BISSELL, OF SAME PLACE.

LATCH FOR STOVE-DOORS.

SPECIFICATION forming part of Letters Patent No. 365,730, dated June 28, 1887.

Application filed March 7, 1887. Serial No. 229,998. (No model.)

To all whom it may concern:

Be it known that I, HENRY P. COPE, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful
5 Improvement in Latches for Stove-Doors, of which the following is a specification.

My invention consists in a latch for doors, primarily designed for use on the doors of car-stoves to prevent accidents caused by the door
10 coming open when the car meets with an accident, hereinafter fully described.

Figures 1, 2, and 3 show my invention as applied to a sliding door, Fig. 1 being an elevation of the door, latch, and keeper, with
15 part of the stove, Fig. 2 being an elevation of the latch and locking device in position, and Fig. 3 a similar elevation with the locking device out of position; Fig. 4, an elevation showing a modification of the invention, in
20 which the latch is applied to a hinged door and is in position to permit the latter to open; Fig. 5, a view similar to Fig. 4, showing the latch locked; Figs. 6 and 9, detail views of the keeper or catch shown in Figs. 4 and 5;
25 Figs. 7, 8, and 10, detail views showing another modification in the construction of the keeper or catch.

1 represents the body of the stove, and 2 represents a door adapted to slide in the ways
30 3 3, which are secured to the body of the stove.

9 represents a keeper or catch, secured to the stove at the end of the ways 3, having therein a slot, 17.

16 represents a hook-headed latch, pivoted
35 at 10 to the door 2, having its hook pointing downward, and 6 represents a similar but shorter latch, having its hook pointing upward, pivoted at 7 to latch 16, and having on its inner end a handle, 15, the pivot 7 being
40 so located that the handle end of latch 6 is heavier than the hook end.

It is obvious that when latches 16 and 6 are forced through the slot 17 of the keeper or catch 9 the weight of the two latches will
45 cause the hook on the end of the latch 16 to engage with the lower side of slot 17, while the weight of the handle end of latch 6 will cause the hook of said latch to engage with the upper side of slot 17. When the handle
50 15 is raised, the under surface of the other end

of latch 6 will bear against the lower side of slot 17, and will, through pivot 7, lift the hook of latch 16 out of engagement with the lower side of slot 17, as clearly shown in Fig. 3, so that the door will be unlocked and can be slid
55 open.

4 represents a locking device, pivoted at 13 to a lug, 14, on latch 16, above the handle end of latch 6, and may have in its upper end a handle, 5, whereby it can be swung by hand
60 on its pivot. The lower end of locking device 4 is formed in two cam projections, 11 and 12, the distance between the end of cam 11 and the pivot 13 being so small that when cam 11 is over latch 6 said latch can be so raised as
65 to unlock the door, as shown in Fig. 3, and the distance between the end of cam 12 and the pivot 13 being so great that when cam 12 is over latch 6 the handle end of said latch cannot be raised, and the door is kept locked, as
70 clearly shown in Figs. 1 and 2.

The foregoing part of the description applies to the latch when constructed for sliding doors. When it is to be used on swinging doors, the ends of the latch are not hooked, but are made
75 plain or slightly widened at the end, as preferred.

Referring to Figs. 4, 5, 6, and 9, 18 18 represent two hook-catches, forming a keeper, and secured to the body of the stove and projecting therefrom, like the ordinary hook-catch of a thumb-latch, the lower catch 18 being adapted to engage with latch 16 and the upper one with latch 6.
80

In the modification shown in Figs. 7, 8, and
85 10 a single arrow-headed catch, 19, is used instead of the two catches 18, and the under part of the outer end of latch 16 and the upper part of the outer end of latch 6 are cut away to form a slot, 20, between said two
90 latches, into which the point of the arrow-headed catch 19 enters and spreads the outer ends of said latches in opposite directions, latch 16 riding over the catch and the latch 6 riding under the catch and closing behind the
95 shoulders thereof by gravity. The principle of the latch is the same in all the details herein shown, and the locking device operates the same, no matter which of said details is used.

It will be noticed that the locking-cam 4 is so
100

proportioned that so long as the stove is in a position in which the weight of latches 16 and 6 hold them engaged with the catch the tendency of the locking device is to remain in the position shown in Figs. 3, 4, and 10, in which it is inoperative, but that if the stove be thrown into any position in which the action of gravity would tend to open the latches the heavier end of locking-cam 4 is thrown out of equilibrium and falls into the position shown in Figs. 2 and 5, in which it holds the latches securely locked.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a door and a keeper, of a double latch, one pivoted at its end to the door and the other pivoted to said first latch at a point between the center of gravity of the second latch and its outer end,

each of said latches having a hook or its equivalent at one end to engage the keeper, substantially as and for the purposes described.

2. The combination, with a door and a keeper, of a double latch, the inner one pivoted to the door and having a lug and the outer latch pivoted to the inner latch, each of said latches having a hook or its equivalent at one end to engage the keeper, and a swinging locking device having two cam projections and pivoted to the lug on the inner latch above the outer latch to lock the same when the action of gravity tends to unlock the latch, substantially as described.

HENRY P. COPE.

Witnesses:

SUMNER COLLINS,
CYRUS E. LOTHROP.