

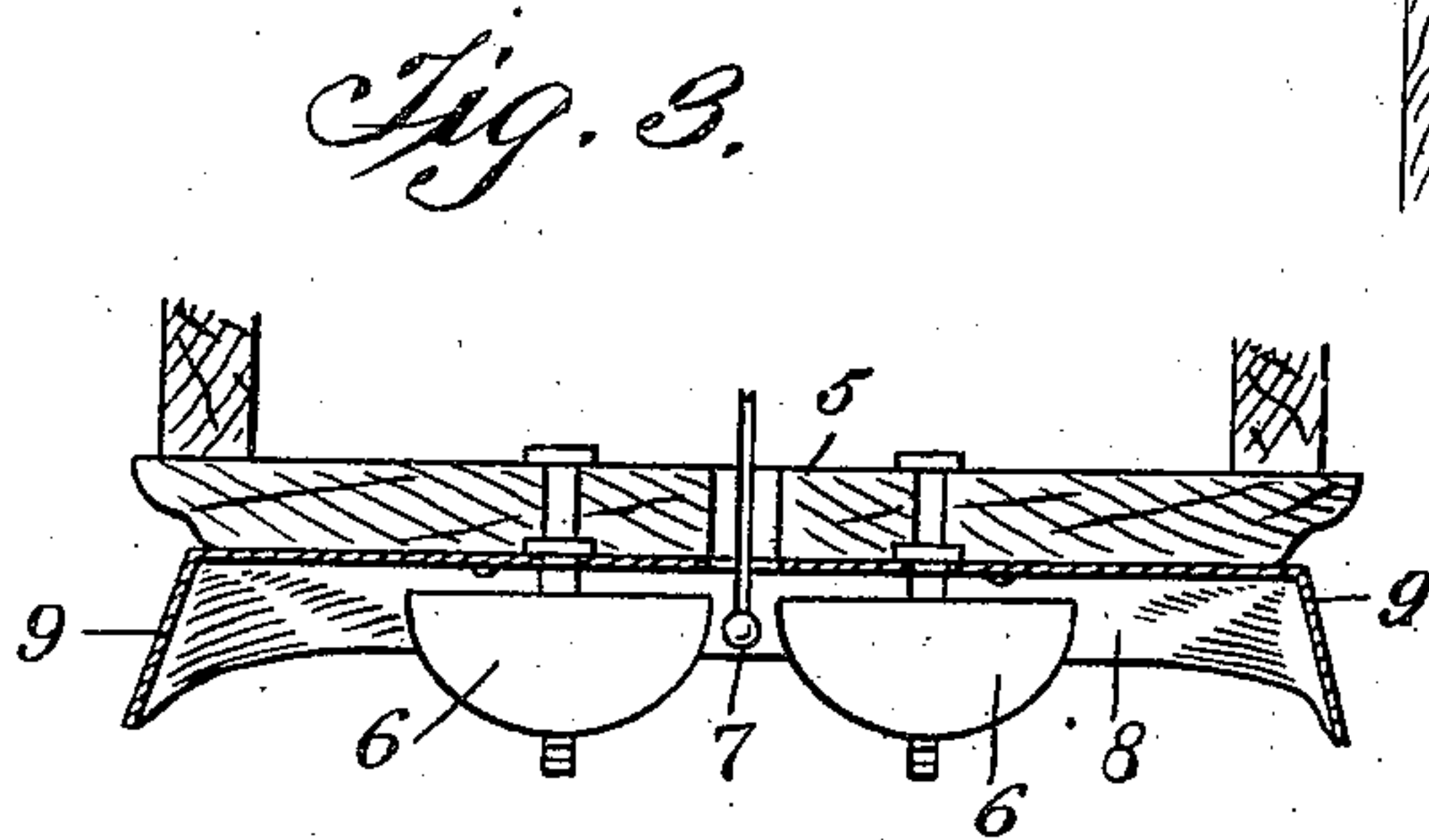
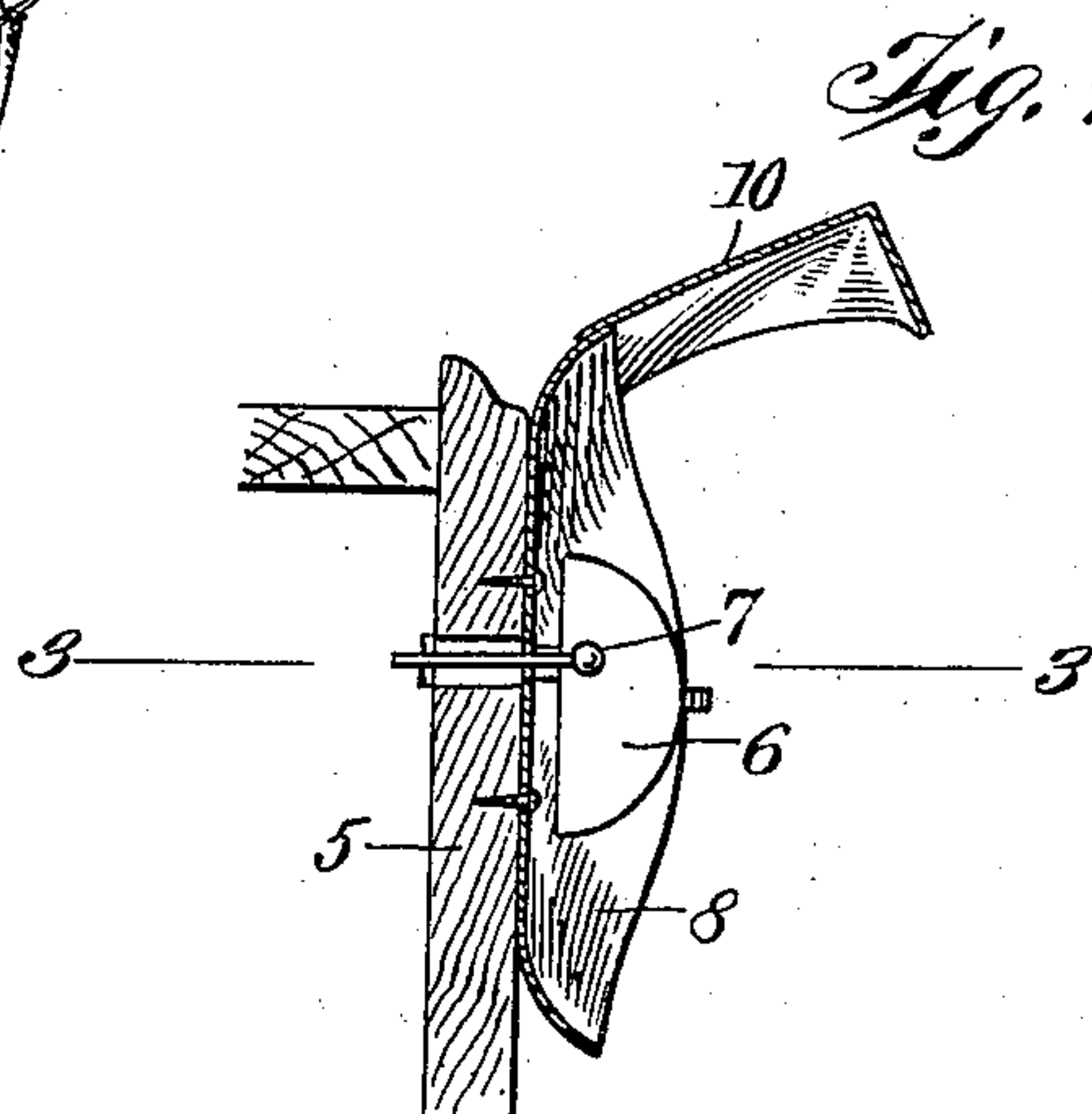
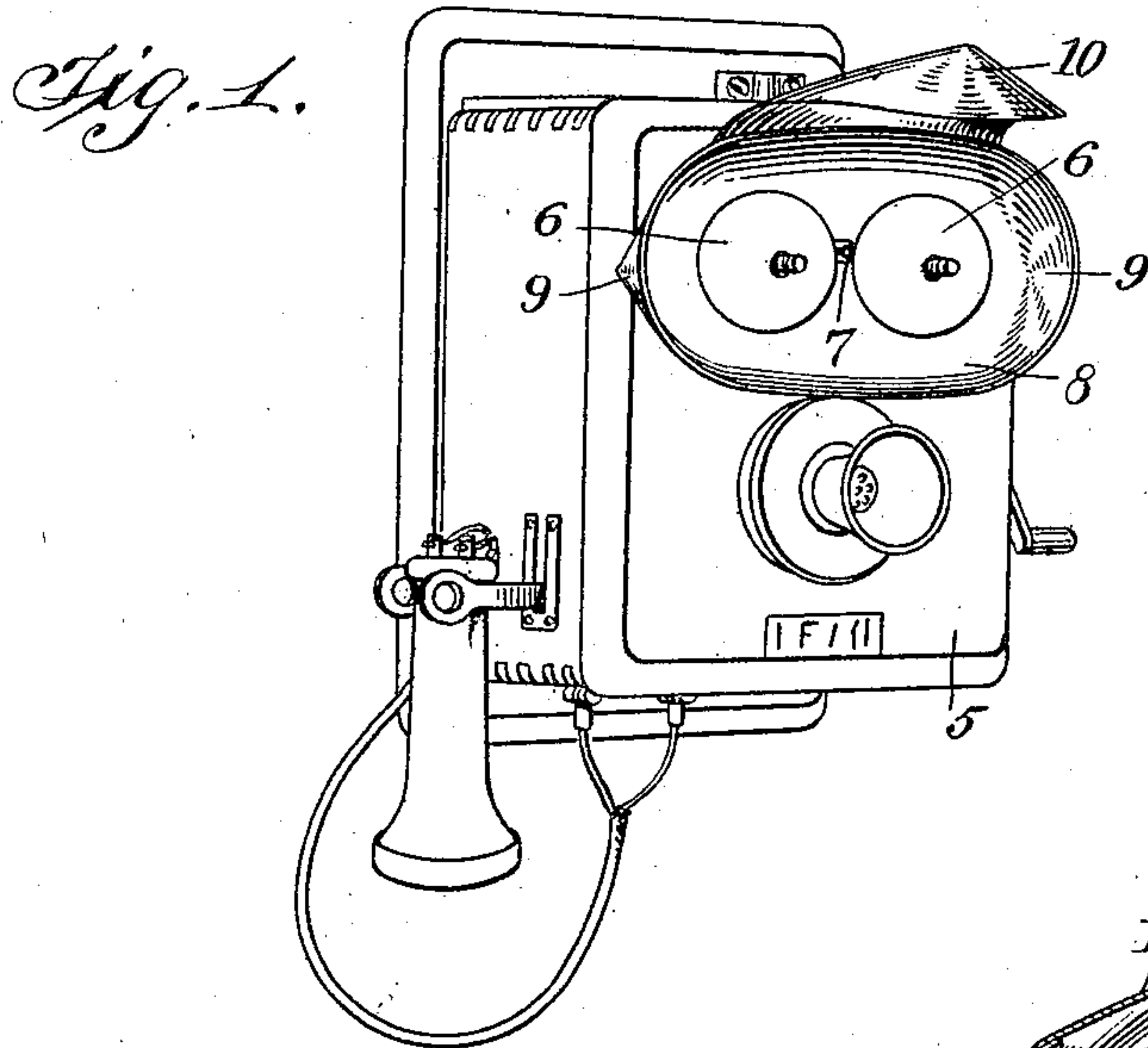
P. E. FINLAY.

RESONATOR.

APPLICATION FILED NOV. 24, 1908.

927,959.

Patented July 13, 1909.



WITNESSES

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UNITED STATES PATENT OFFICE.

PATRICK E. FINLAY, OF NEW ORLEANS, LOUISIANA.

RESONATOR.

No. 927,959.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed November 24, 1908. Serial No. 464,239.

To all whom it may concern:

Be it known that I, PATRICK E. FINLAY, a citizen of the United States, and a resident of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Resonator, of which the following is a full, clear, and exact description.

The invention is an improved resonator, more especially designed for augmenting the sound of telephone bells or other signals, and is particularly adapted to the telephones of shops, pumping stations and other places where ordinary sounds are not discernible, especially under heavy atmospheric conditions or in damp or rainy weather.

The invention may be defined as consisting of an elongated dished body having sound reflectors at opposite ends facing forwardly and inwardly, and a similar sound reflector overhanging the center of the body and facing downwardly and inwardly.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a telephone having my improved amplifier or resonator applied thereto; Fig. 2 is a central vertical section through the same; and Fig. 3 is a horizontal section substantially on the line 3—3 of Fig. 2.

For convenience of illustration I have shown my invention applied to a well-known form of telephone 5 having two bells 6, 6, on the front face thereof, between which the usual vibratory striking arm 7 projects.

The resonator consists of an elongated sound-reflecting body 8 having reflectors 9, 9, at opposite ends, and an overhanging reflector 10, the body being of sheet material as, for example, sheet brass, and dished, with a flat bottom portion which is attached to the front face of the telephone, suitable openings being provided for the reception of the bells and vibratory striker, the latter passing through the body at its center. The reflectors 9 are preferably cone-shaped and integral with the body and face forwardly and inwardly, with their foci located a sub-

stantial distance forwardly of the resonator on the principal or central axis. The reflector 10 is similar in construction to the reflectors 9, and faces downwardly and inwardly, serving to collect and reflect the sound waves against the dished reflecting body. That portion of the reflector 10 extending to and attached to the body 8 is tangent thereto and flattened, in order that a neat joint with the body may be effected.

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

1. A resonator comprising a dished body having sound reflectors at opposite sides facing forwardly and inwardly, with the inner wall of one reflector separate and distinct from the inner wall of the other reflector.

2. A resonator comprising a dished body having sound reflectors at opposite sides facing forwardly and inwardly, and an overhanging sound reflector independent of the side reflectors carried by the body, facing downwardly and inwardly.

3. A resonator comprising a body having approximately cone-shaped sound reflectors at opposite ends integral therewith and facing forwardly and inwardly.

4. A resonator having dished reflectors at opposite ends for collecting and amplifying the sound and projecting the sound waves forwardly and inwardly, and a dished reflector elevated above the said reflectors for collecting and projecting the sound waves downwardly and inwardly.

5. A resonator consisting of a dished body having a flattened bottom with conical sound collectors at opposite ends, and a conical sound collector overhanging the body and attached thereto.

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

PATRICK E. FINLAY.

Witnesses:

WM. WALTER DUNCAN,
WALTER H. ELLIS.