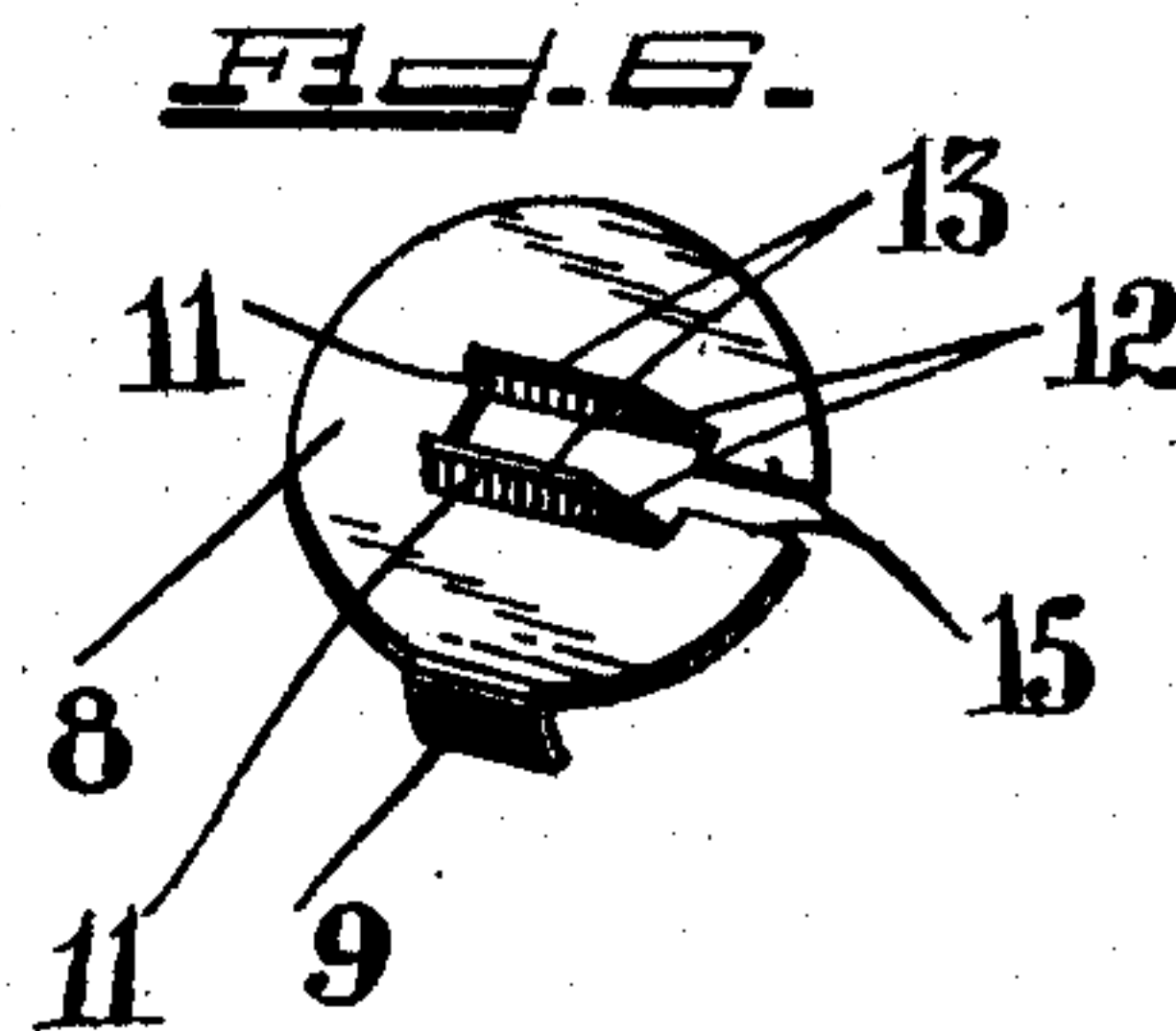
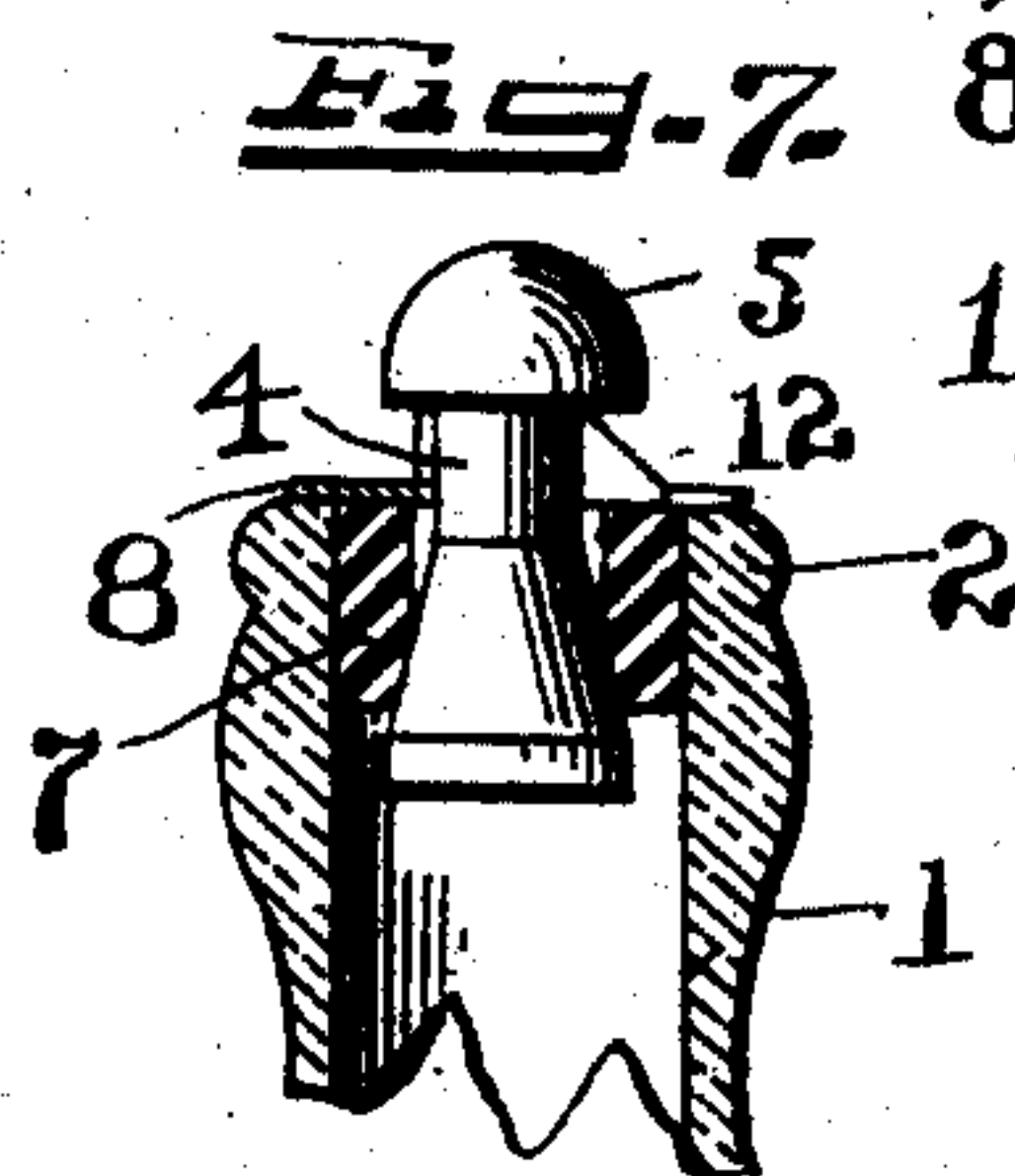
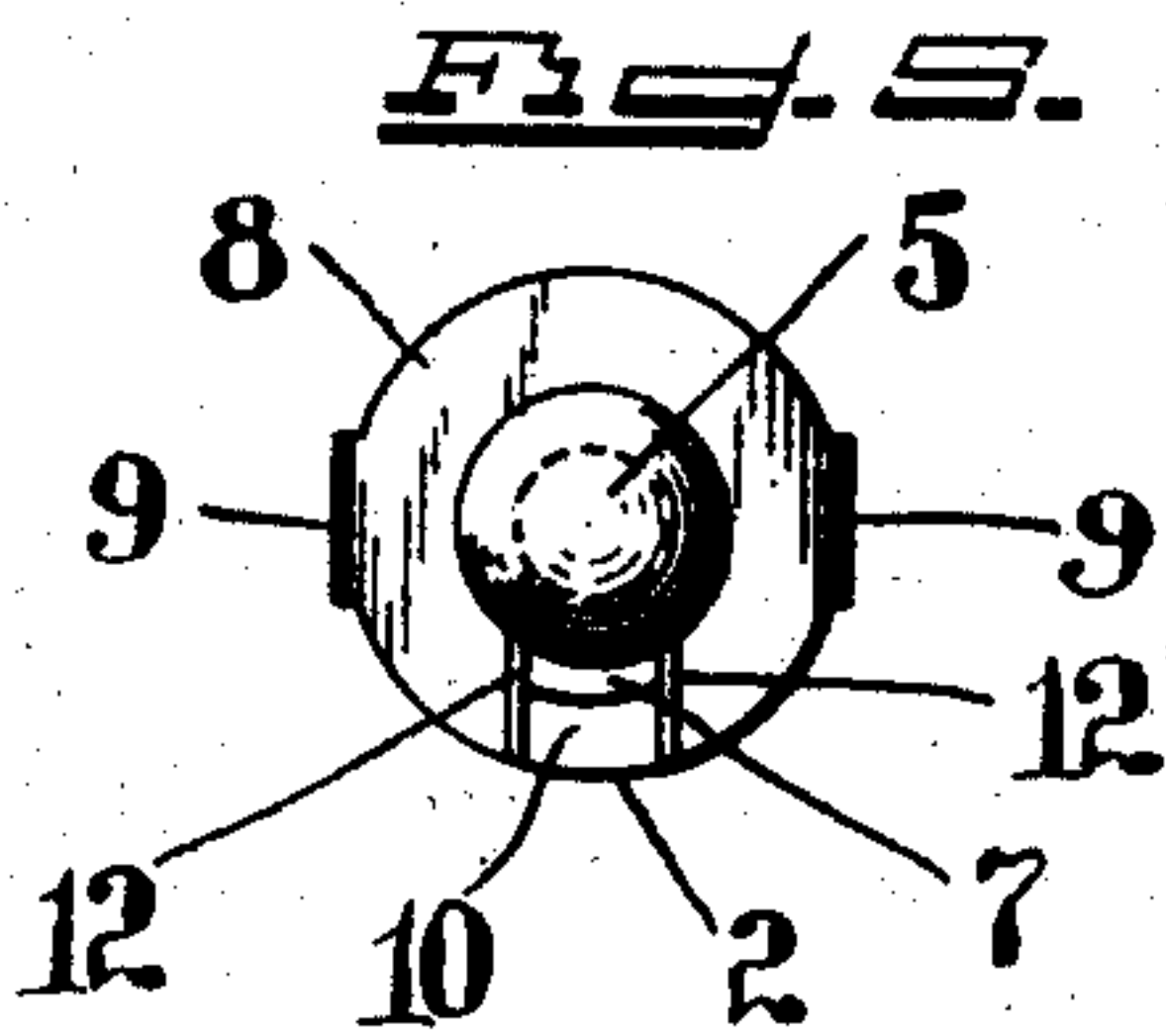
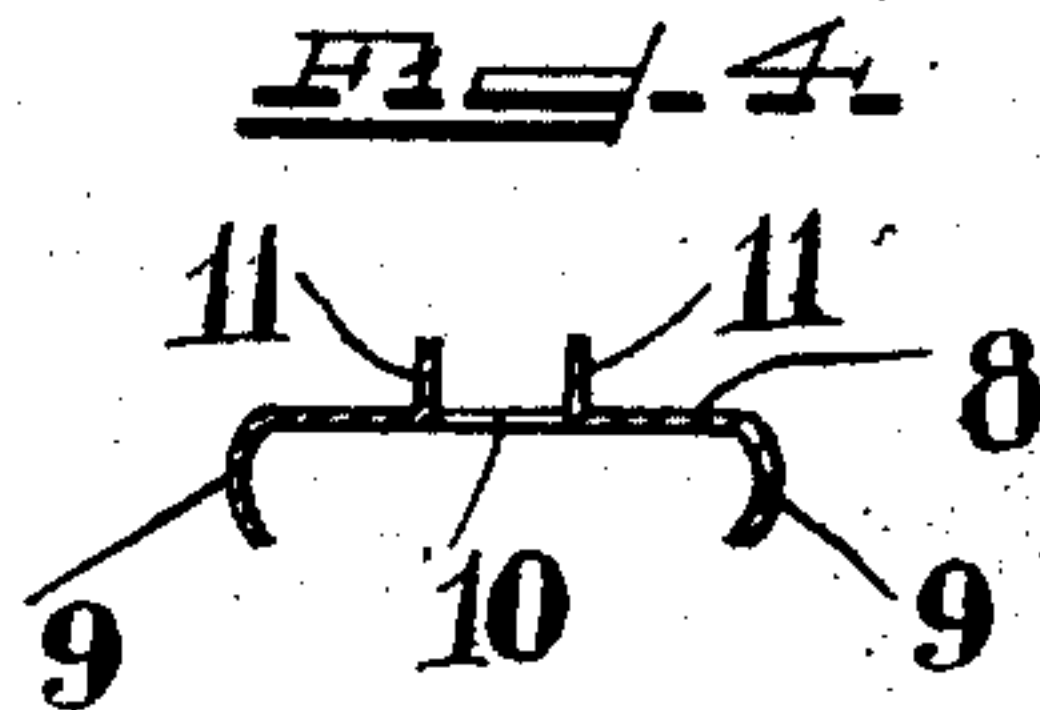
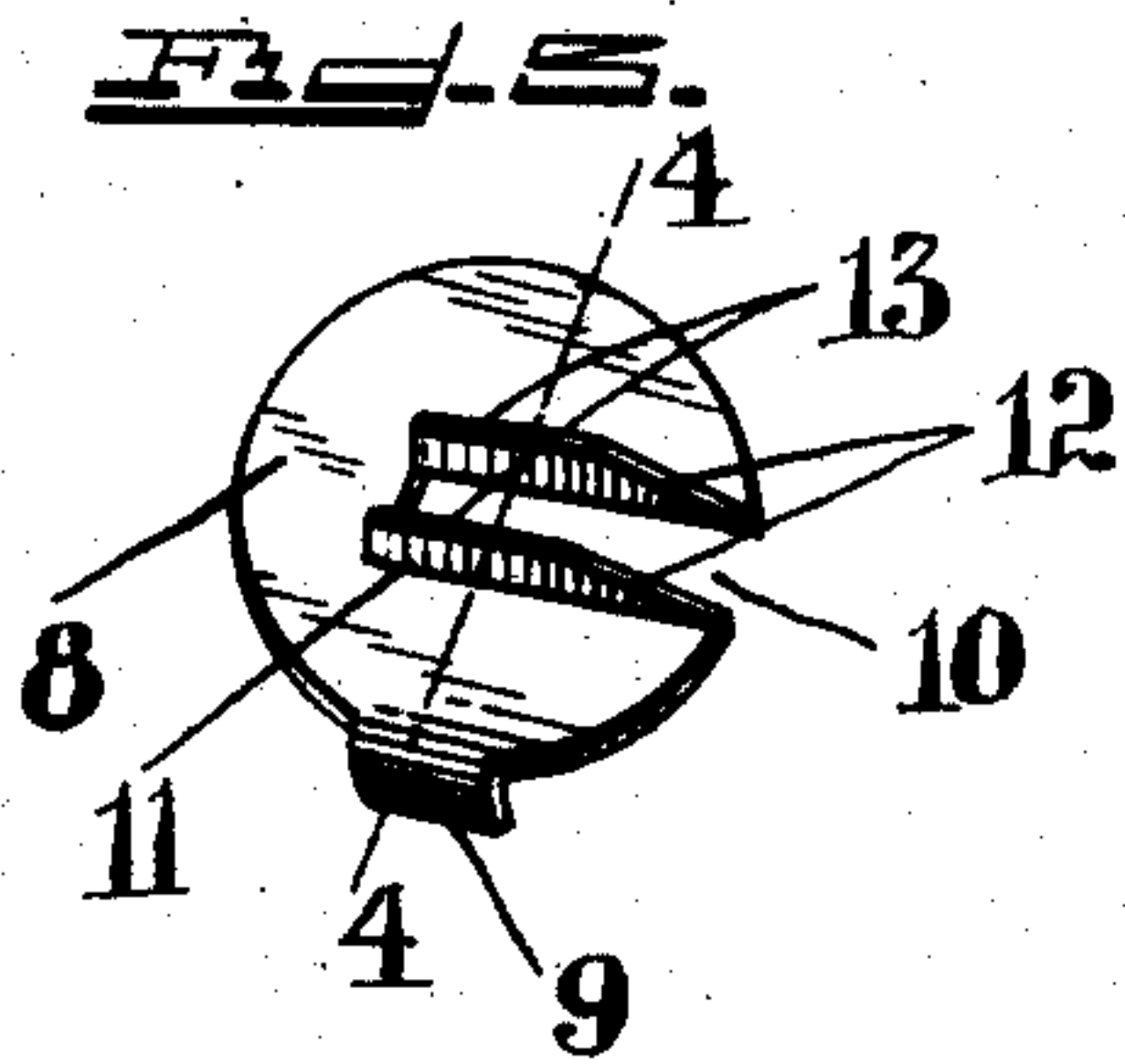
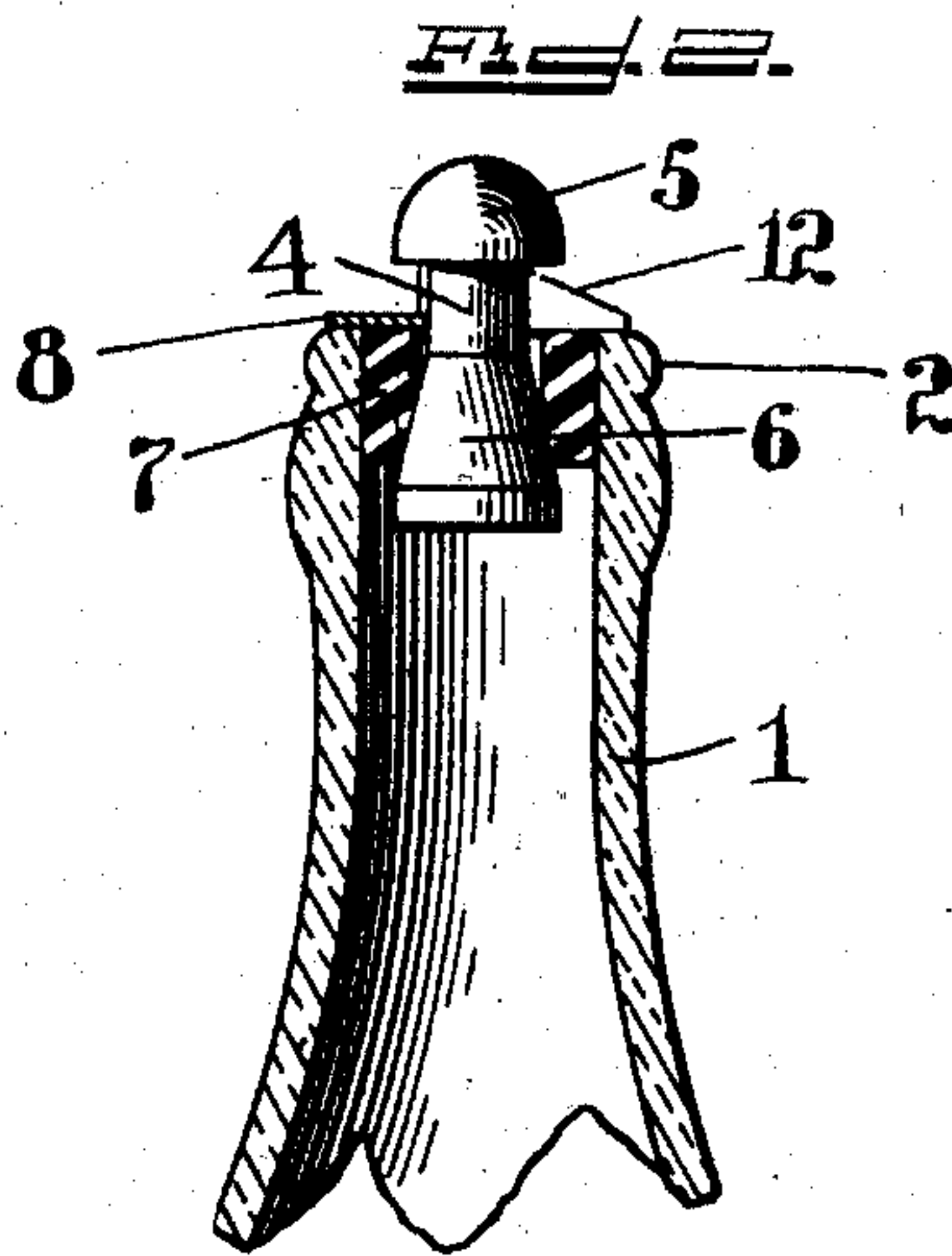
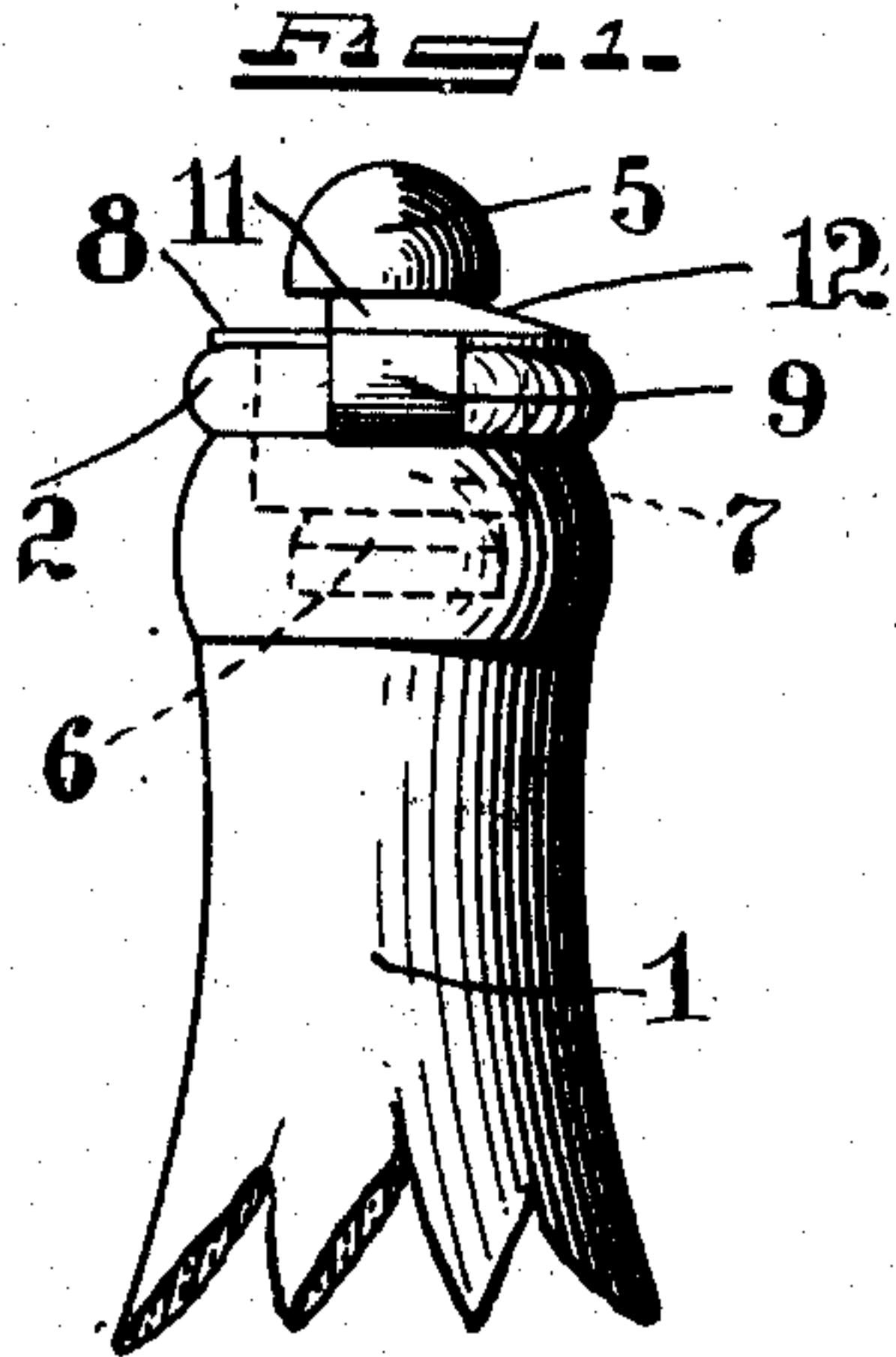


A. HALL.
BOTTLE STOPPER.
APPLICATION FILED APR. 3, 1908.

907,145.

Patented Dec. 22, 1908.



Attest:
S. Mitchell
S. M. Bauer

A. Hall Inventor:
by *Oscar T. Tunny* his Atty

UNITED STATES PATENT OFFICE.

ALBERT HALL, OF NEW YORK, N. Y.

BOTTLE-STOPPER.

No. 907,145.

Specification of Letters Patent.

Patented Dec. 22, 1908.

Application filed April 3, 1908. Serial No. 425,006.

To all whom it may concern:

Be it known that I, ALBERT HALL, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

The object of my invention is to provide a new and improved bottle stopper which is simple in construction strong and durable, closes the bottle reliably, is entirely removable from the bottle and is easily and readily applied and removed.

In the accompanying drawings, in which like letters of reference indicate like parts in all the figures:—Figure 1 is a side view of a bottle head provided with my improved stopper. Fig. 2 is a vertical sectional view. Fig. 3 is a perspective view of the locking plate. Fig. 4 is a transverse sectional view of the same. Fig. 5 is a plan view of the plate and plug therein. Fig. 6 is a perspective view of a modification. Fig. 7 is a vertical section in which the modified form of locking plate shown in Fig. 6, is used.

The bottle 1 has an external bead 2 at its mouth. The stopper consists of a plug and a retaining and locking plate. The plug is made of wood, glass, porcelain, hard rubber or other suitable material and has a stem 4 provided at its upper end with a head 5 and at its lower end with a downwardly and outwardly inclined or beveled block 6, which is loosely surrounded by a rubber packing ring 7.

The locking plate 8 which is preferably struck from sheet metal is provided on its edge at substantially diametrically opposite points with two downwardly curved or bent holding lugs 9 adapted to embrace the bead 2 and thus hold the plate on the bottle mouth. The plate 8 has a notch or recess 10 extending from the edge of the plate slightly beyond the center and of sufficient width to receive the stem 4 of the plug. At each side edge of the notch or recess an upwardly extending flange 11 is struck up and each flange has its upper edge inclined upward from the edge of the plate, to a point about the diameter of the head 5, from the rear end of the flange as at 12 and the top edges of the flanges from these points to the rear or inner ends of the flanges are made horizontal that is parallel with the top of the plate, as at 13.

The plug is inserted in the bottle mouth, block downward, and then the plate 8 is

slipped laterally over the bottle mouth in such a manner that the lugs 9 embrace the bead 2. The inclined flanges or ridges 11 gradually force up the plug, by acting on the underside of the head 5 and thereby the packing ring 7 is compressed and jammed between the beveled block 6 and the bore of the bottle. When the plate 8 has been pushed or forced completely home on the bottle mouth, the underside of the head 5 rests upon the straight parts 13 of the flanges or ridges 11 and thus is not liable to slip off or become dislodged. To open the bottle it is only necessary to slide off the plate 8 and then withdraw the plug, which can easily be grasped between the fingers, by means of the head 5. As shown in Fig. 6 lateral lugs 15 may be provided at the front end of the notch. These lugs extend up vertically before the stem of the plug is inserted and after the stem has been inserted are turned down horizontally to prevent separating the plug and plate entirely. To remove the plug the plate is pushed back until the stem rests against the lugs 15 whereby the plate is unlocked from the bead sufficiently to lift out the plug.

Having described my invention what I claim as new and desire to secure by Letters Patent is:—

1. In a bottle stopper, the combination with a stem having a head at one end and a block at the lower end, of a packing on the block and a clamping and locking plate having side clamping lugs for engagement with the bottle, a notch extending inward from the edge of the plate, and ridges formed along the edges of the notch, substantially as set forth.

2. In a bottle stopper, the combination with a stem having a head at one end and a block at the lower end, of a packing on the block and a clamping and locking plate having side clamping lugs for engagement with the bottle, a notch extending inward from the edge of the plate, and ridges formed along the edges of the notch, the upper edges of the ridges being inclined upward and inward for about half the length of the ridges and the inner end parts of said upper edges being substantially parallel with the top of the plate, substantially as set forth.

3. In a bottle stopper, the combination with a stem having a head at one end and a block at the lower end, of a packing on the block and a clamping and locking plate

having side clamping lugs for engagement with the bottle, a notch extending inward from the edge of the plate, and ridges formed along the edges of the notch, and
5 laterally projecting lugs extending toward each other at the outer end of the notch, substantially as set forth.

Signed at New York city in the county of New York and State of New York this fifth day of March A. D. 1908.

ALBERT HALL.

Witnesses:

FRANK E. RAFFMAN,
S. M. BAEDER.