G. P. SCHMIDT.

Hanging Bells.

No. 148,509. Patented March 10, 1874.

Fig. 1.

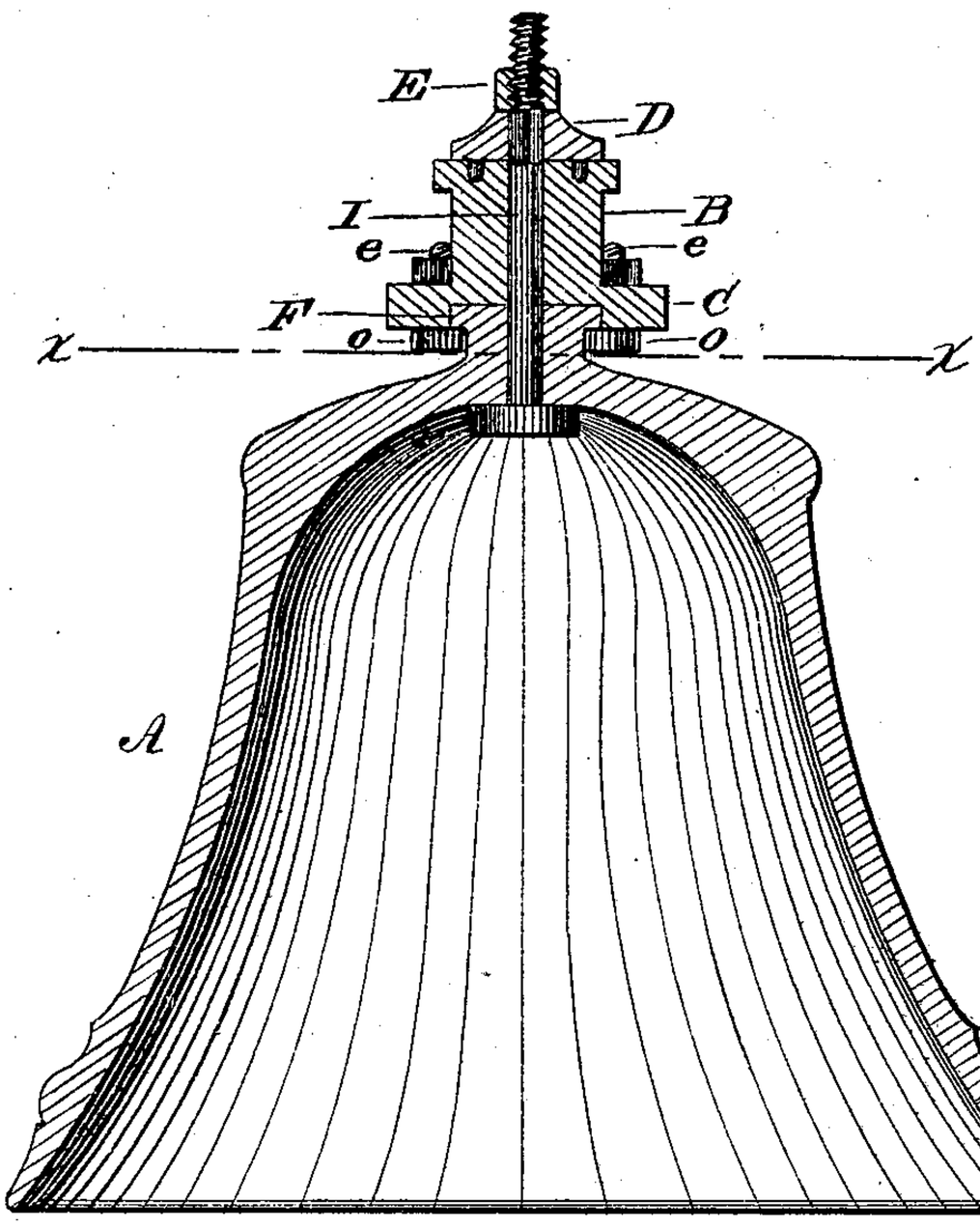


Fig. 2.

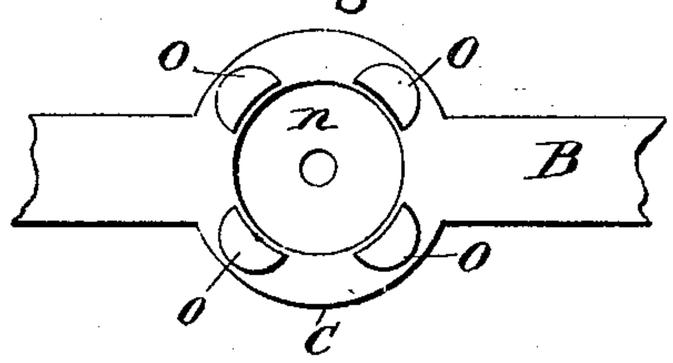
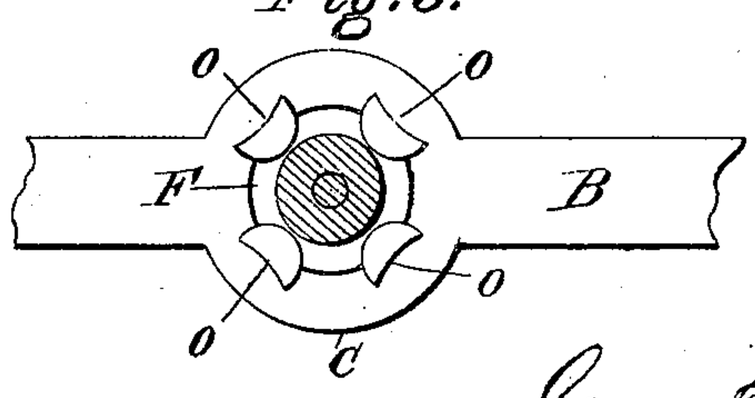


Fig. 3.



Witnesses:
H. H. Dodge.
Edw. W. Dunn

Inventor:
Geo. P. Schmidt
by Dodger & Sons
attys.

UNITED STATES PATENT OFFICE.

GEORG PAULUS SCHMIDT, OF BALTIMORE, MARYLAND, ASSIGNOR TO HENRY McSHANE & CO., OF SAME PLACE.

IMPROVEMENT IN HANGING BELLS.

Specification forming part of Letters Patent No. **148,509**, dated March 10, 1874; application filed January 16, 1874.

To all whom it may concern:

Be it known that I, GEO. PAULUS SCHMIDT, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain Improvements in Hanging Bells, of which the following is a specification:

My invention relates to the mode or means of securing bells, such as are used on buildings, to their yokes; and the invention consists in so constructing and uniting the bell and its yoke that the bell can be turned or rotated around its central or longitudinal axis, so as to prevent the hammer from always striking on the bell at the same point, as hereinafter more fully explained.

Figure 1 is a transverse sectional view of a bell and its yoke with my improvements applied thereto. Fig. 2 is a plan view of the central portion of the yoke at the point where bell is attached, and Fig. 3 is a transverse section on the line *x x* of Fig. 1.

It is well known that bells become worn at the points where the tongue strikes it, and that in time their tone becomes affected thereby; and, also, that the continual blows of the tongue or hammer on a particular point not unfrequently cracks or breaks the bell; and it is to obviate these difficulties that my invention is designed.

To accomplish this, and at the same time attach the bell securely to its yoke, I proceed as follows: First, I make the bell with a solid circular flange or collar, F, at its top, as shown in Figs. 1 and 3. I then construct the yoke with a central hub or enlargement at the point where the bell is to be attached, and provide this hub with a radial flange, C, as shown in Fig. 1. I also form a circular recess, *n*, as shown in Fig. 2, in the under face of the central portion of the yoke B, of such a size as to receive the flange F, as shown in Figs. 1 and 3. I make a series of holes through the flange C of the yoke, in which I insert bolts *e*, which have broad heads *o* below, and are secured by nuts at the upper side of the flange C. These bolts, of which four are shown in the drawings, have their heads *o* cut away at one side, as shown in Figs. 2 and 3, so that when the cut side is turned toward the recess *n* they stand outside of the boundary-line of said recess, in which case the collar F of the bell will freely enter the recess. When thus entered, the bolts are turned, as represented in Fig. 3, by which their heads are made to engage under the collar F, as shown in Figs. 1 and 3, thereby locking the yoke B and the bell A together. In order to render it still more secure, I pass a bolt, I, through the bell and yoke, as shown in Fig. 1; and to hold the bolt from turning and loosening the nut E, which secures it at the top, I make a small portion of its upper part, just below the screw-thread, rectangular in form, and fit thereon a strong washer or plate, D, which has a corresponding hole in it, and which is prevented from turning by a couple of small studs or pins that project from its under side and fit into corresponding recesses in the yoke B, as shown in Fig. 1. This bolt I has a large head, the more securely to hold the bell, and as a bearing on which it may turn.

It is obvious that the collar F and the central hub of the yoke B, with its flange C, may be made of any desired size, and thus afford the means of fastening the bell to its yoke with perfect security. It is also obvious that the bolts *e*, after the bell and yoke are united, may be secured, so as to prevent their being accidentally turned; and, also, that, if desired, a sectional ring or washer may be inserted under the collar F, the bolts passing through the same, in which case the heads of the bolts need not project under the collar.

I, however, prefer the plan shown in the drawings, as it is simpler, and I find it ample for all desired purposes.

When thus constructed and arranged, the bell can readily be turned, whenever necessary, by simply loosening the nuts; or they may be left sufficiently loose to permit it to be turned at any time. By these means I am enabled to present different parts of its surface to the action of the tongue or hammer, and at the same time render the attach-

ment of the bell to its yoke perfectly secure, which, with large bells, is a matter of great importance.

Having thus described my invention, what I claim is—

The bolts *e*, provided with the semicircular heads *o*, arranged, in relation to the collar F, as shown and described, whereby the collar can be secured or released by turning the bolts, as set forth.

GEORG PAULUS SCHMIDT.

Witnesses:

THOMAS I. WELBY,

FRANCIS X. RUSSELL.