G. R. MENEELY.

Hanging Bells.

No. 21,422. Patented Sept. 7, 1858.

Fig. 1

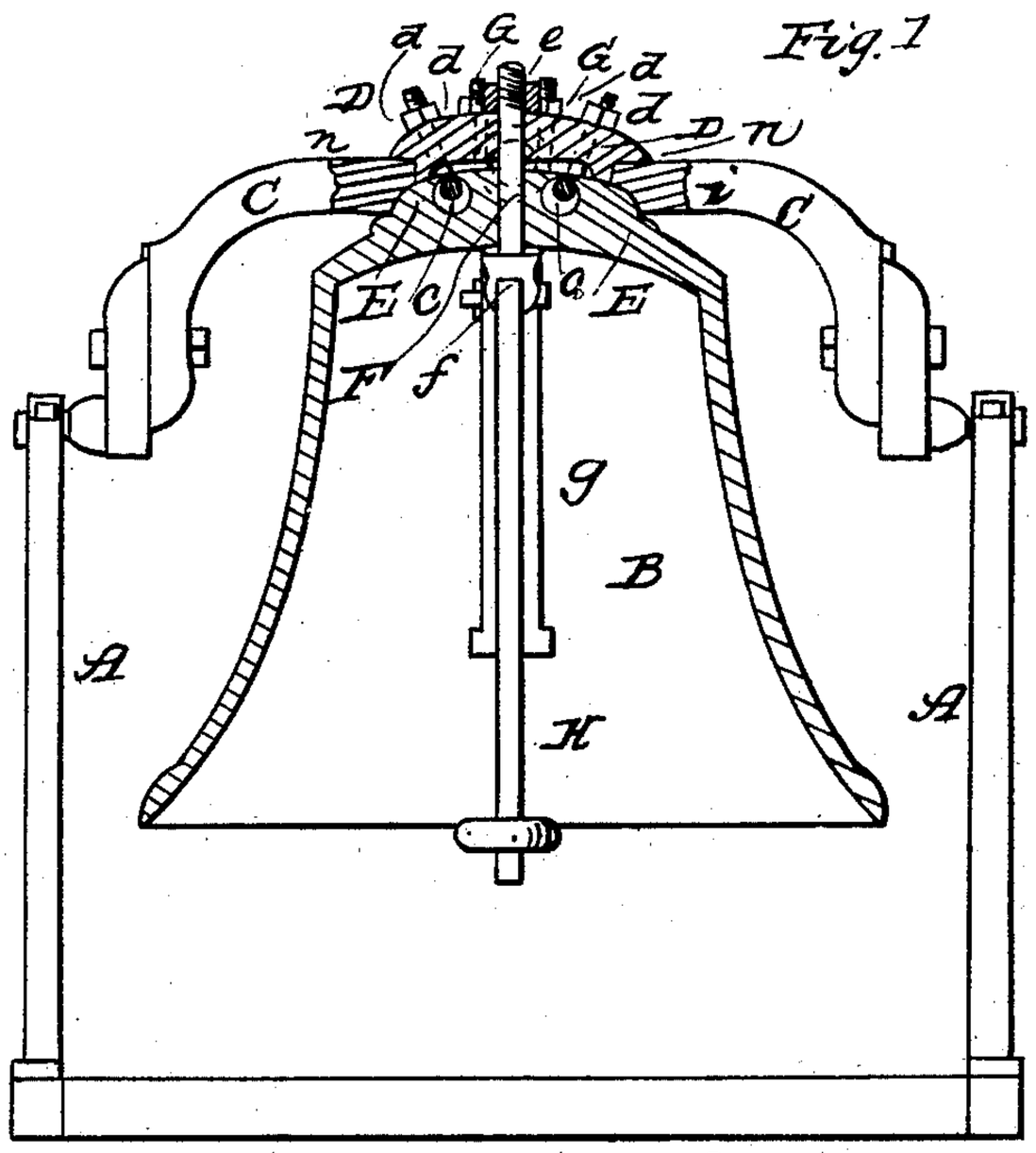
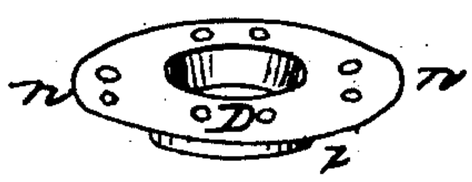
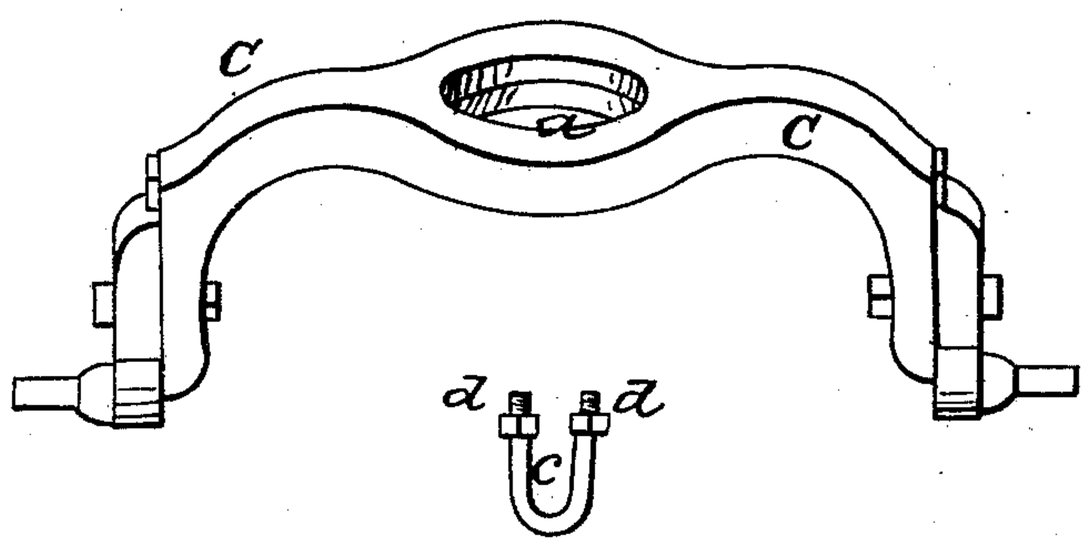


Fig. 2





UNITED STATES PATENT OFFICE.

GEORGE R. MENEELY, OF WEST TROY, NEW YORK.

HANGING BELLS.

Specification of Letters Patent No. 21,422, dated September 7, 1858.

To all whom it may concern:

Be it known that I, GEORGE R. MENEELY, of West Troy, in the county of Albany and State of New York, have invented certain new and useful Improvements in the Manner of Connecting a Bell and its Clapper to the Yoke; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and in which—

Figure 1, represents a section through the bell and a portion of the yoke. Fig. 2, represents the washers, yoke, and clevis bolts, arranged one over the other, so as to show their forms.

Similar letters of reference where they occur in the separate figures, denote the same parts, or devices in both figures.

Bells have heretofore been cast, with a view of turning them in their yokes; but in these cases a round shank is cast on the bell, for this special purpose, and this makes a very insecure connection between the bell and yoke, and often form the quantity of metal used there, injuries the tone of the bell. Such a connection can only be made, too, when the bell is specially cast with this object in view.

By my invention, I can take an old fashioned bell, which has horns on it of the common kind, and by means of my contrivance, so connect it with the yoke that, while it retains its usual, well tried, and secure fastening, and clear tone, it can also be turned in the yoke to change the part or portion that receives the blow of the clapper.

No attempt, previous to mine, had ever been made, to take an ordinary bell furnished with horns, and so arange it in the yoke, as to admit of its being turned therein, and this constitutes the gist of my invention. To cast a bell with a round shank so that it may be turned in its yoke, is accomplishing one object, by sacrificing two main elements in a bell viz: its entire security when hung, and its tone, both of which I maintain are impaired or jeopardized. I take a bell as I find it, one which has been made with a view to strength, and clearness of tone, and without injury to either, I so connect it with a yoke, as that it will have all the advantages, without a single one of the disadvantages that must attach to a single fastening, or to a mass of metal injudiciously disposed on a bell. These differences, and objects will more clearly define the nature and extent of my invention than it can be otherwise shown. I will therefore briefly state that, my invention does not extend to, or embrace, bells with round shanks cast or wrought upon them, but it relates to, and consists in, the manner in which I connect the horns of a bell with its yoke, so that it may be turned in or on said yoke.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents a frame of any suitable kind—and B represents a bell hung therein by a yoke C. The yoke C, is pivoted to the frame, so that it may freely rock therein. There is a round opening *a* through the center of the yoke, over which fits or sets a washer or cap D, that has a flange *i*, on its under side, that snugly fits into said opening but so that said cap may be freely turned when necessary to do so, in the said opening; this flange *i* together with the projecting rim *n*, of said cap D, form a shoulder that bears vertically and horizontally against the yoke, so that while it can be moved, it shall still have a firm support thereon.

E, E, are the horns of the bell, of which there are commonly four on each bell; the opening *a* in the yoke on its underside, admit these horns to enter up through it, until they come to, or near to, the underside of the cap D, so that they and the cap may be as near together, as a due regard for strength in the yoke will admit. Clevis or **U** shaped bolts *c*, *c* are passed through the openings in the horns, and then up through the cap or washer D, and nuts *d*, *d*, &c., run down upon them, thus securely connecting the bell to the cap, and both to the yoke.

F, is a rod or shank passing up through the bell, and through a washer G, that fits into a conical shaped opening in the center of the cap D; and a nut *e*, is then run down onto said shank and tight against said washer G. A vertical slot is cut in the opening in the washer G, and a stud or pin is inserted in the shank F, over which this slot takes—this prevents the shank from turning around until the nut *e* is loosened, and then it can be readily turned with the washer G. To the lower end of this shank F, the clapper H is pivoted at *f*, so as to swing thereon.

g, are springs for raising the clapper,

after it has struck the bell—they being in the path in which said clapper swings.

When it is desired to turn the bell in the yoke, so as to change the portion of it against which the clapper strikes, it is only necessary to unloosen the nuts *d*, *d*, &c., and the bell and its cap or washer will move together around the opening in the yoke. When sufficiently moved, fasten the nuts *d*, and all is secure again. In shifting the bell, of course the clapper goes with it. Now it is necessary for the clapper to always swing at right angles to the yoke, so that after the bell is shifted, the nut *e* must also be loosened, and the clapper and its washer G, turned so as to stand at right angles to the yoke. The nut is then run down, and the change is effected. The bell and its washer or cap, and the clapper with its washer, move together and not independent of each other—the former turning in the opening through the yoke, and the latter turning in the bell and opening in the cap. But I do not restrict my invention to any particular manner of turning the clapper in the bell, as it may be done in other ways—the invention relates to the method of connecting the bell and yoke.

Having thus fully described the nature and object of my invention what I claim therein as new and desire to secure by Letters Patent is—

So uniting a bell furnished with horns, to a yoke, through the intervention of a cap, and clevis bolts, as that said bell may be turned in its yoke, in the manner and for the purpose specified.

GEO. R. MENEELY.

Witnesses:
URIEL DEXTER,
AUSTIN F. PARK.