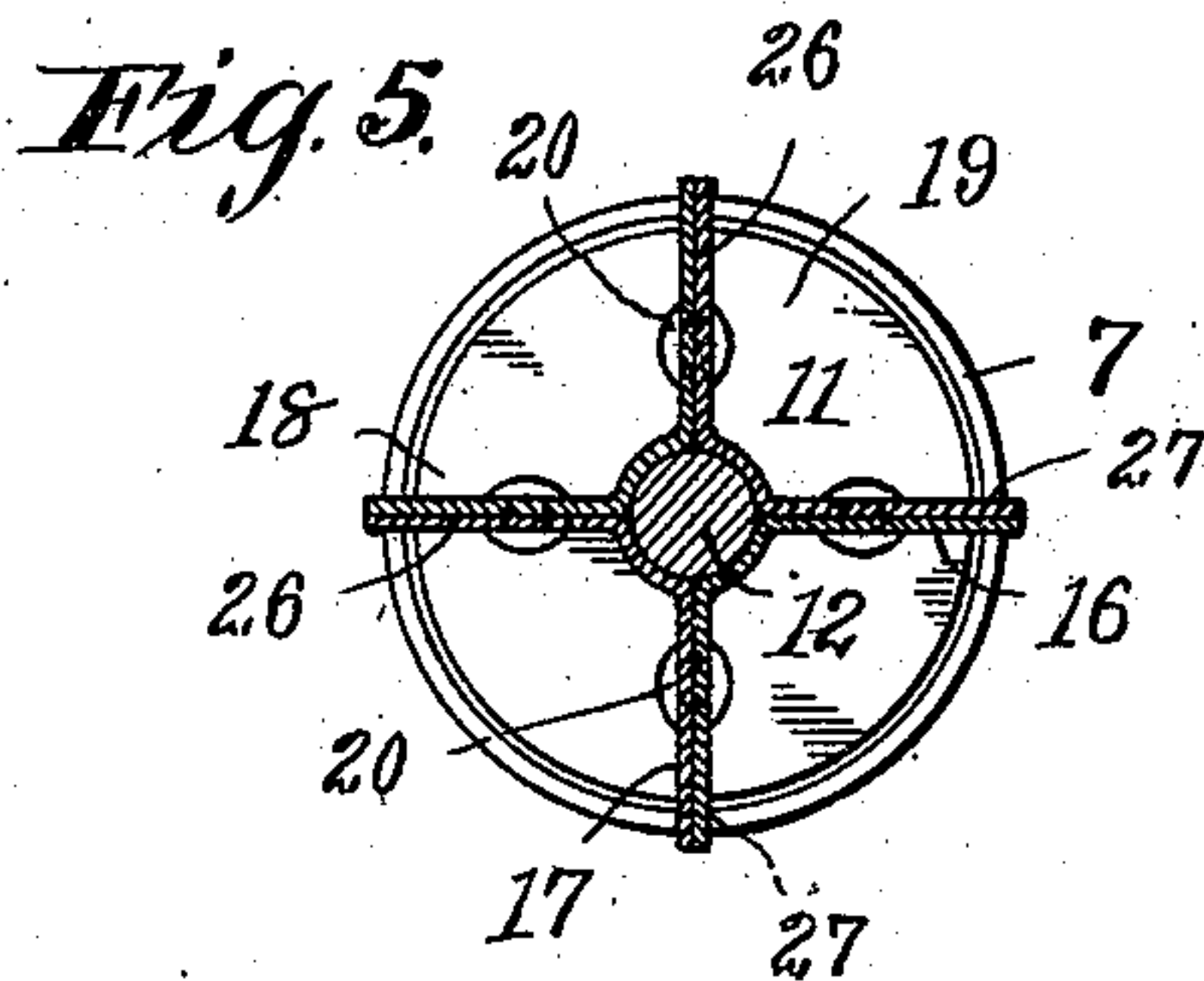
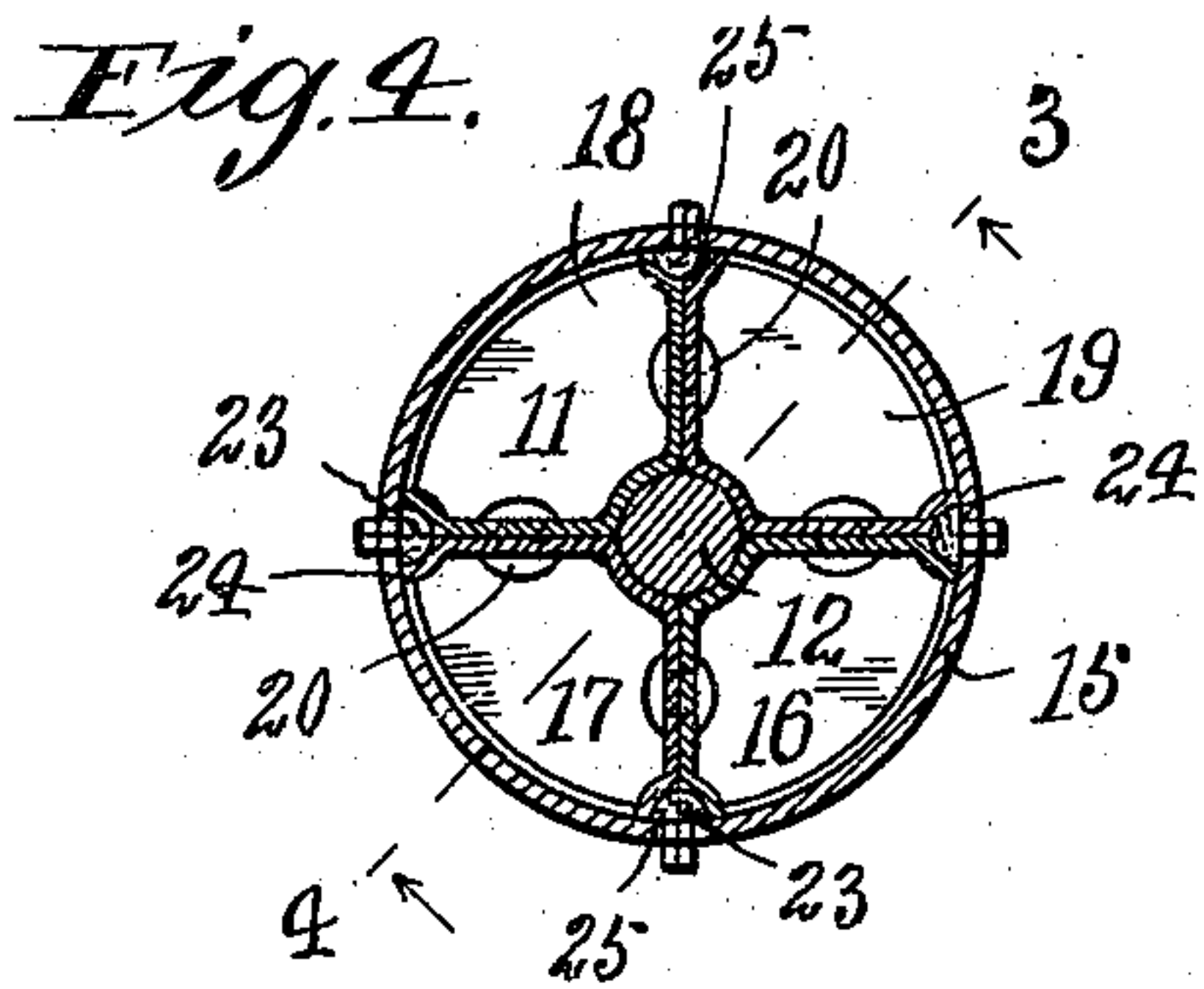
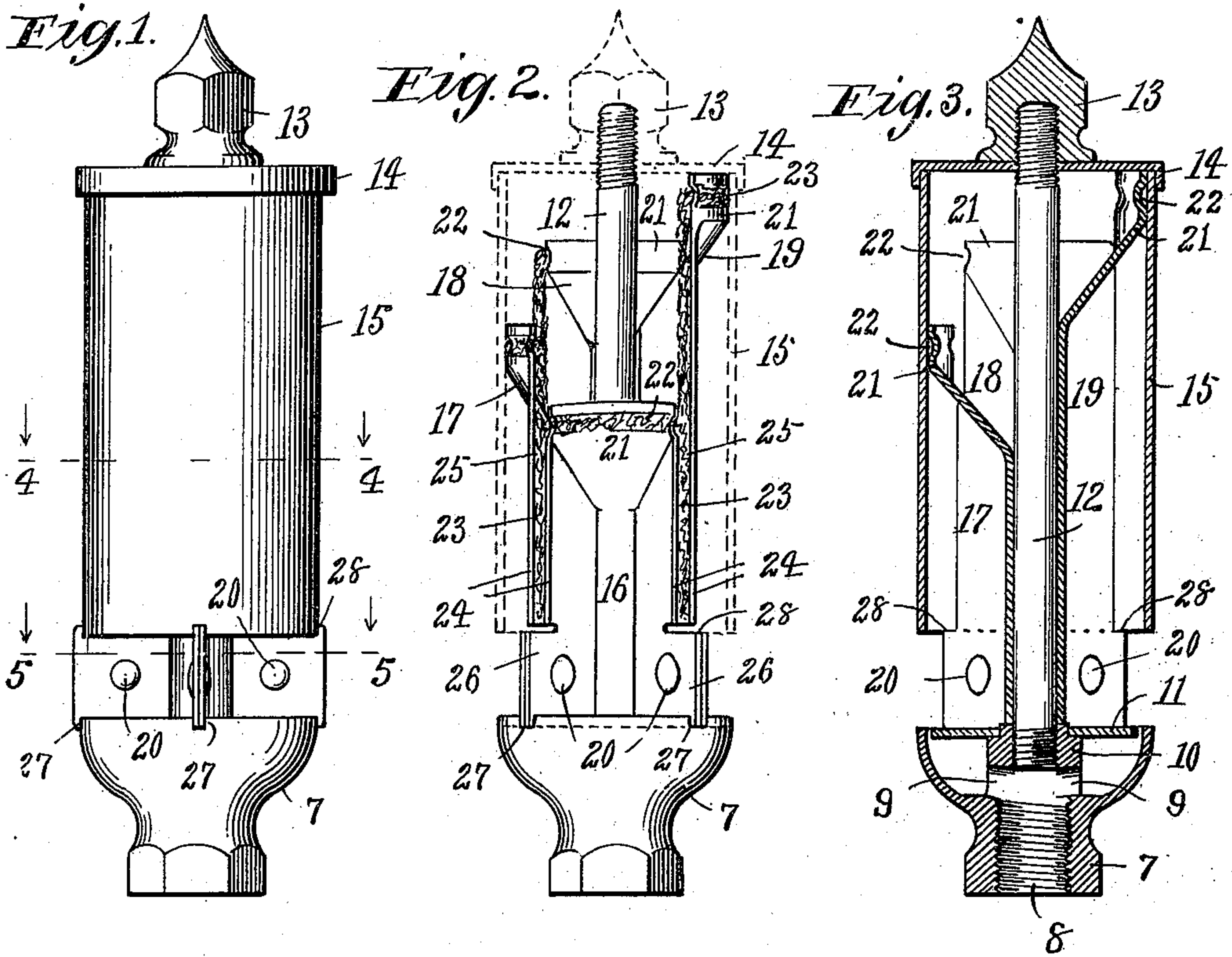


J. A. ANDERSON.  
CHIME WHISTLE.  
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981,604.

Patented Jan. 17, 1911.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN A. ANDERSON, OF BRIDGEPORT, CONNECTICUT.

CHIME-WHISTLE.

981,604.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed April 1, 1909. Serial No. 487,113.

*To all whom it may concern:*

Be it known that I, JOHN A. ANDERSON, a citizen of the United States, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Chime-Whistles, of which the following is a specification.

This invention relates to new and useful improvements in chime-whistles such as are operated by steam or air and designed to produce a variety of sounds by reason of the device being divided into a series of compartments of varying lengths.

It is the purpose of my invention to simplify and improve the construction of whistles of the above class, by so designing the same as to permit them to be made largely of sheet metal, which can be conveniently stamped up in a way to require a comparatively small amount of machining preparatory to being assembled for use; also to provide means for packing joints between the several parts of the whistle as may be required to prevent the escape of steam or air, according to which may be used to operate the whistle.

To enable others to understand my invention I have illustrated the same upon the accompanying drawings forming a part of this specification, upon which reference characters are used to denote like or corresponding parts throughout the several figures and of which,

Figure 1, shows a side elevation of my improved chime-whistle complete. Fig. 2, is a further side elevation of the whistle showing the top nut and inclosing bell in dotted lines, better to illustrate the connected sheet metal sections forming the several internal compartments. Fig. 3, is a central vertical longitudinal section taken on line 3—3 of Fig. 4. Fig. 4, is a sectional plan view taken on line 4—4 of Fig. 1, and Fig. 5, is a similar sectional plan view taken on line 5—5 of Fig. 1.

Referring in detail to the characters of reference marked upon the drawings 7 represents the base or bowl member of the whistle which is preferably formed of cast metal and provided with a central threaded inlet 8 to which a steam or air pipe, not shown, is attached. A series of ports 9 connect this inlet with an annular compartment surrounding the central hub 10 which latter is shouldered to receive a covering plate 11

seated within the bowl. The diameter of this plate is not quite equal to that of the upper inner portion of the bowl thus forming an annular steam or air passage from the bowl whereby the steam introduced through the hole 8 is permitted to escape and pass up into the several compartments of the bell.

A central rod 12 is threadably attached to the upper portion of the said hub 10 and is threaded at its upper end for the attachment of a binding nut 13 which is seated against a top cap 14 having a depending annular flange to surround and engage the upper end of the cylindrical bell 15. The lower end of this bell is spaced from the bowl 7 and the plate 11, so as to permit the steam to pass out after blowing up into the several compartments of the whistle.

The interior of the bell is preferably divided into four compartments 16, 17, 18 and 19 each of which represent a quarter section but are of different lengths. These sections are each formed separately, from sheet metal by being stamped up to the desired shape and size. The inner vertical corner portion of each section is concaved to fit up against the side of the rod, while the vertical and radially disposed side portions fit flush against that of the adjoining sections. These vertical sides are secured together by means of rivets 20 which pass through the lower portion thereof. The upper portion 21 of each of these sections are disposed outward having their edges curved slightly to conform to the shape and engage the inner surface of the bell. The outside of this curved edge portion is further provided with a groove 22 into which a suitable wick or other form of packing 23 is placed to form a tight fit of the section to the bell. The adjoining vertical edges 24 of the respective sections are disposed in opposite directions and curved outward so that the two edges combined will form a vertical concave pocket 25 into which the packing before mentioned may also be placed so as to pack the vertical joints intermediate the two sections. The lower end portions 26 of each section are extended out beyond the bell and base and the under edges are seated in suitable notches 27 of the top edges of said base while the top edges 28 are similarly seated in like notches in the bottom edge of the bell to form a shoulder to support the same.

From the foregoing it will be seen that



the several sections within the bell are each formed separately, being stamped up by separate and different size dies ready to be assembled and secured together by means of the rivets before mentioned. It will also be noted that when so assembled a central round hole is formed intermediate the sections which permits of them being placed upon the rod secured to the base. After this the bell, cap and nut are connected up in their respective order. The packing before referred to would obviously be placed in position just prior to the attachment of the bell.

The action of the steam or air when either is used is to blow up through the annular passage of the base and into the several sheet metal compartments which being of different lengths produce a different sound and which when combined produce the chime effect desired, the steam then passes back and out through the opening formed intermediate the base and bell.

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

1. In a chime-whistle, the combination with a base having steam ports therethrough, of a series of sheet metal sections mounted upon the base and having straight flat radially disposed side portions that fit flush against each other, rivets passing through said side portions for securing them together, a bell to inclose the sections and form the same into compartments.

2. In a chime-whistle, the combination with a base having steam ports therethrough, of a series of separately formed sheet metal sections having abutting radial side portions that fit flush against each other and having a longitudinal concave groove in the inner corner portion to form a round central hole through the parts when assembled, a bell to inclose the said sections and a rod passing through the hole for securing the bell in such position around the sections.

3. In a chime-whistle, the combination with a base having steam ports therethrough, of a series of sheet metal sections of different lengths stamped up to form straight flat and radially disposed side portions adapted to fit flush up against each other and to form a central round hole through the sections when assembled, means passing through the said side portions for securing the sec-

tions together, a bell to inclose the sections and form separate compartments.

4. In a chime whistle, the combination with a base having steam ports therethrough, of a sheet metal section designed to form a compartment and comprising straight flat radial side portions in planes at an angle to each other, and a longitudinal concaved groove extended along the inner corner portion of the section, a bell to inclose the section, and means to secure the parts together.

5. In a chime-whistle, the combination with a base having steam ports therethrough, of a series of sheet metal sections of equal cross section having vertical and radially disposed sides that fit flush against each other, means for securing said side portions of the sections together, vertically disposed packing grooves intermediate the outer edges of said adjoining side portions, a separate and detachable bell for inclosing the said sections, and a suitable packing within the grooves intermediate thereof and the bell.

6. In a steam-whistle, the combination with a base having a passage for steam and notches in its upper edge, a series of separately formed sheet metal sections having abutting side portions that are extended outward near the bottom to engage the notches of the base, a bell to inclose the upper part of said sections and also provided with notches to engage the upper edges of the extensions to hold the same against side-wise movement, and means for securing the parts together.

7. In a whistle of the class described, the combination with a base having steam ports therethrough, of a series of sheet metal sections of different sizes and each having top and side portions, said top being provided with a circumferential groove and the sides having their longitudinal edges disposed outward to form packing grooves intermediate the adjacent edges when the sections are assembled, and a bell to inclose the sections and means to secure the parts together.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut this 23rd day of March, A. D., 1909.

JOHN A. ANDERSON.

Witnesses:

C. M. NEWMAN,  
RUTH RAYMOND.