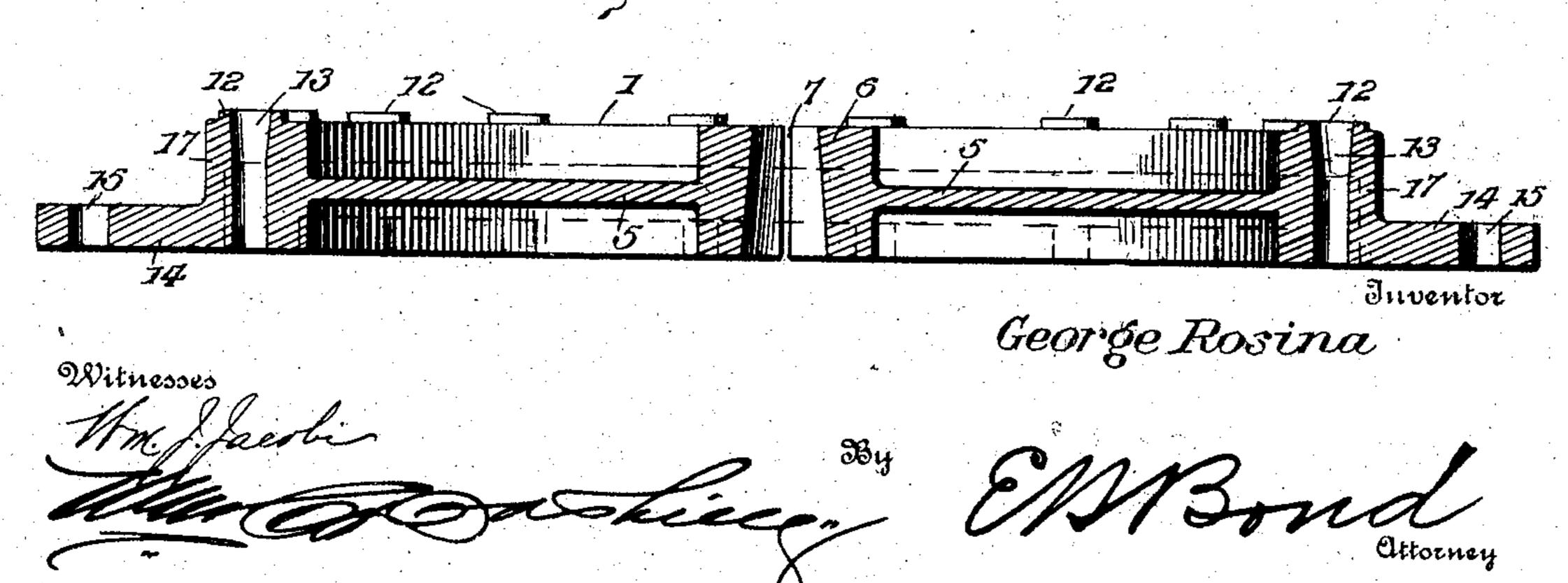
G. ROSINA. POWER WHEEL.

APPLICATION FILED AUG. 25, 1904.

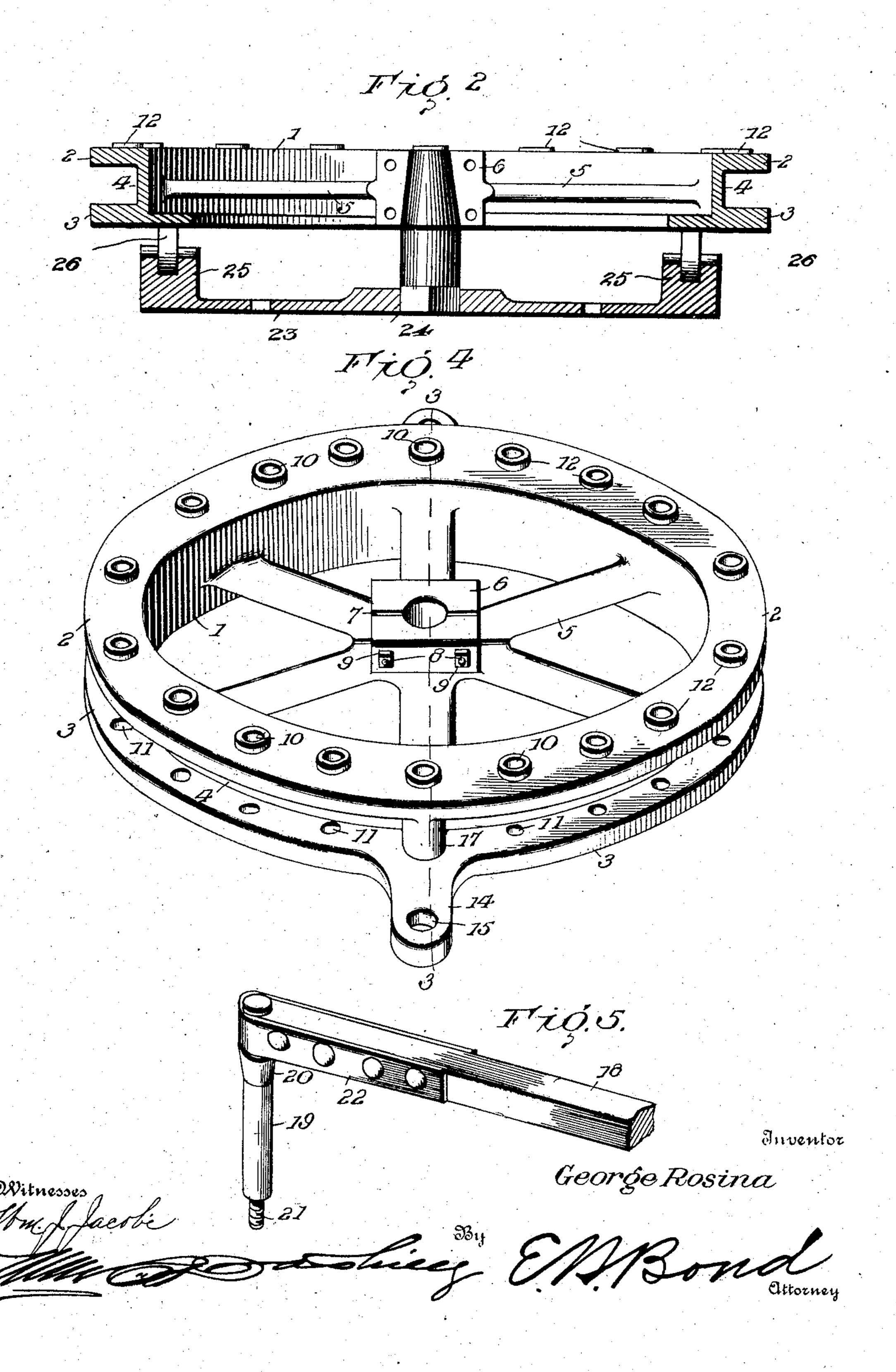
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Fig. 3.



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United States Patent Office.

GEORGE ROSINA, OF FOSTORIA, OHIO, ASSIGNOR TO ATLAS SAFE CO., OF FOSTORIA, OHIO.

POWER-WHEEL.

SPECIFICATION forming part of Letters Patent No. 780,528, dated January 24, 1905.

Application filed August 25, 1904. Serial No. 222,176.

To all whom it may concern:

Be it known that I, George Rosina, a citizen of the United States of America, and a resident of Fostoria, in the county of Seneca 5 and State of Ohio, have invented certain new and useful Improvements in Power-Wheels, of which the following is a specification.

This invention relates to certain new and useful improvements in pull-wheels or power-10 wheels designed primarily for use in pumping oil, but of course applicable to other uses; and it is to be understood that the present in-

vention is not in this wise restricted.

The present invention has for its objects, 15 among others, to provide an improved wheel of this character which shall be simple and efficient, providing for the use of a plurality of rods for connection with different wells, and insuring that the means connecting the 20 rods to the rim of the wheel shall not become loose or accidentally disengaged. The wheel is formed with a double flange, between which and upon one side of which the rods are connected in such a manner as to permit of 25 freedom of movement and yet prevent dropping of the arms or their connecting-bolts in case the nuts thereon should become loose.

I aim, further, at improvements in the details of construction whereby a better wheel 30 is produced and its manufacture greatly fa-

cilitated and cheapened.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by 35 the appended claims.

The invention is clearly illustrated in the

accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a plan view of my improved wheel. Fig. 2 is a cross-section on the line 22 a cross-section on the line 3 3 of Fig. 4. Fig. 4 is a perspective view of the wheel proper 45 before the arms are attached. Fig. 5 is a perspective view showing a portion of one of the arms and its attaching-bolt.

Like numerals of reference indicate like parts throughout the several views.

Referring now to the details of the draw- 50 ings, 1 designates the body portion of the wheel, having its periphery flanged, as shown at 2 and 3, to form the annular channel 4. The center of the wheel is connected by the spokes 5, the said center having the boxing 6, 55 which is tapered, as seen best in Figs. 2 and 3, being oppositely slit, as seen at 7, and suitable bolts 8 and nuts 9 being provided, as shown, for an obvious purpose. The flanges 2 and 3 are provided with the coincident holes 60 10 and 11, the upper flange being provided with the bosses 12 about its openings, as seen clearly in Fig. 3, and the upper openings being tapered or beveled, as seen at 13 in Fig. 3.

At diametrically opposite sides the wheel 65 is formed with the outwardly-extending lugs 14, with suitable openings 15 for the attachment of the rods 16 from the engine, which latter may be of the usual construction. The flanges 2 and 3 of the periphery of the wheel 7° adjacent these lugs are connected by the tubular portions 17, as seen in Figs. 3 and 4, for adding strength at these points, as will be

readily understood.

18 represents the rods running from the 75 wheel to the different wells. They are attached, as shown, one between the flanges 2 and 3 and the other above the upper flange. They are attached and secured in position by means of the bolts 19, which have a tapered 80 portion 20 near their upper ends to fit the taper of the holes in the upper flange, it being understood that the said taper or bevel on the bolt fits only the corresponding hole in the upper flange, and the portion of the bolt 85 engaging in the hole in the lower flange is not tapered, but is truly cylindrical, as seen in Fig. 5, and passes through the tubular connecting portion between the flanges or through the space between the flanges when such tu- 90 of Fig. 1 with the arms removed. Fig. 3 is | bular connecting portions are not present. This construction is for the purpose of preventing the bolt from dropping farther down in order to leave space on the end of the bolt to attach the rod on top outside the upper 95 flange, as will be readily understood from reference to Figs. 1 and 5. The bolt is screwthreaded at its lower end, as seen at 21, to

receive a nut. One or more rods may be attached on any of the bolts in the openings in the flanges of the rim, between the flanges or on top of the upper one, as may be found 5 necessary. The end of the rod 18 is provided with a suitable metallic strap 22, as seen in Figs. 1 and 5, to strengthen it at that point.

In Fig. 2 I have shown a supporting or base plate 23, having a central opening 24 ro for the spindle, and lugs 25, in which are journaled the rollers 26, upon which the wheel is supported in order to prevent the wheel from running uneven, and thus avoiding strain on one side of the wheel when the wheel is 15 higher on one side than on the other, as some-

times is the case.

From the above it will be seen that I have devised a wheel of the general character above specified that is capable of manufacture at 20 minimum cost, which will be found durable and efficient, and also one in which the rods can be quickly and easily attached or removed for the purpose of repairs or other purposes. I avoid projecting lugs at the periphery of 25 the wheel for the attachment of the rods and otherwise improve upon the prior constructions of wheels of this nature.

Modifications in detail may be resorted to without departing from the spirit of the in-3° vention or sacrificing any of its advantages.

What is claimed as new is—

1. A power-wheel having peripheral flanges, with coincident openings, the upper one being tapered, and rods having securing-bolts 35 with tapered portions engaged in the tapered openings of the upper flange.

2. A power-wheel having peripheral flanges

with openings, the upper one being tapered, bolts with portions extended through the openings of the upper and lower flanges with the 40 portions engaged in the upper openings being tapered, and rods mounted on said bolts between the flanges and above the upper flange.

3. A power-wheel having peripheral flanges, the upper flange having tapered openings, 45 bolts passed through the openings of the upper and lower flanges and having tapered portions engaged in the upper openings only, and rods having their ends mounted on said bolts, one between the flanges and the other 50

above the uppermost flange.

4. A power-wheel having a central boxing oppositely slit and tapered to receive a spindle, and a peripheral channel with upper and lower flanges provided with openings and 55 bosses, bolts passed through said bosses and openings and having provision to prevent their dropping through the openings, and rods mounted on said bolts.

5. A power-wheel having peripheral flanges 60 and coincident openings through the flanges, with tubular connections between the flanges, wheel-operating rods secured between said flanges, means for preventing the rod-securing means from dropping through the open- 65 ings, and engine-rods connected with the wheel beyond said flanges.

Signed by me at Fostoria, Ohio, this 20th

day of August, 1904.

GEORGE ROSINA.

Witnesses: FRANK CUYKENDALL, M. A. Thomas.