

(No Model.)

E. I. FISK.
WHEEL FELY ATTACHMENT.

No. 508,927.

Patented Nov. 21, 1893.

Fig 1

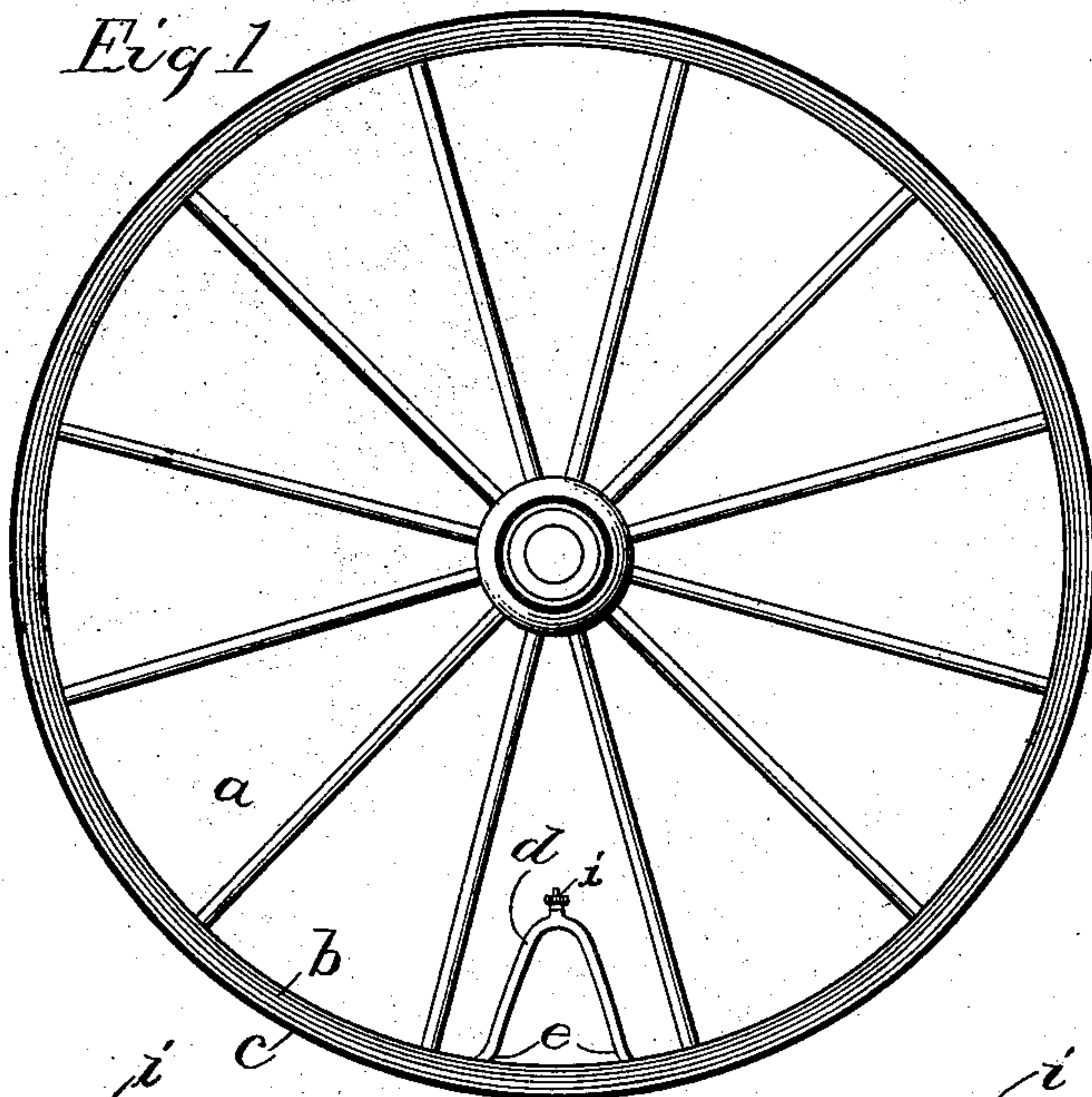


Fig 2

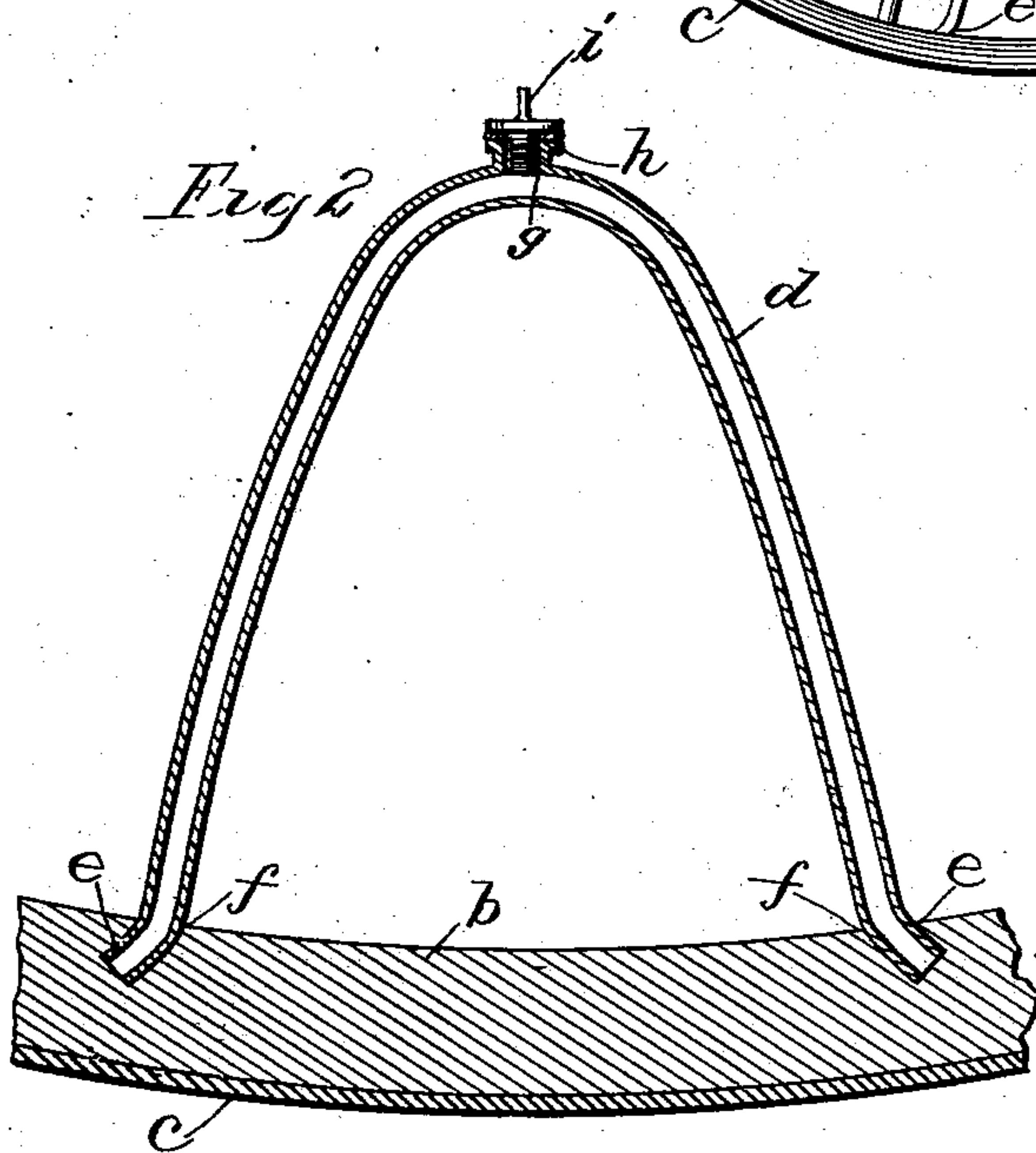


Fig 5

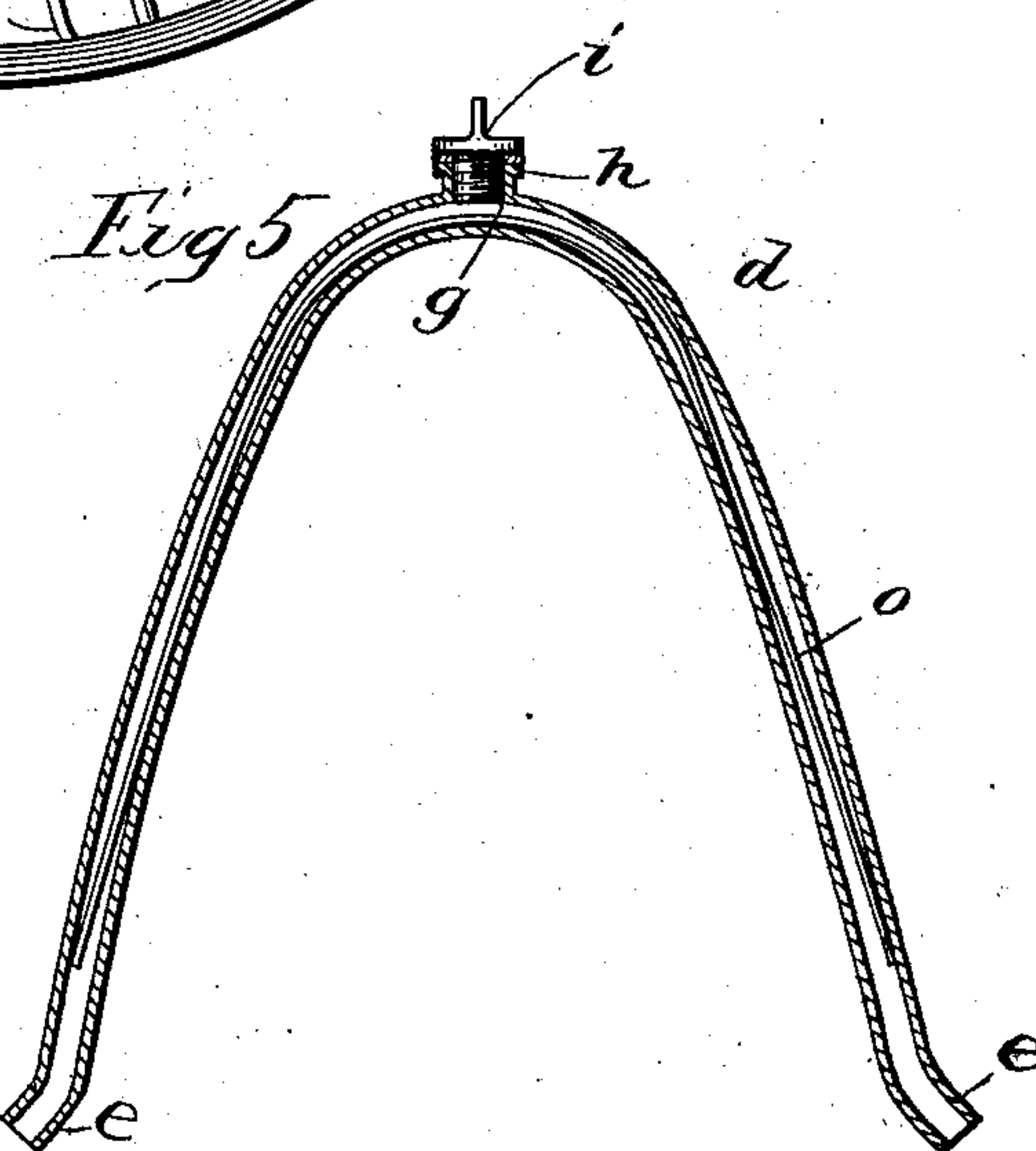


Fig 3

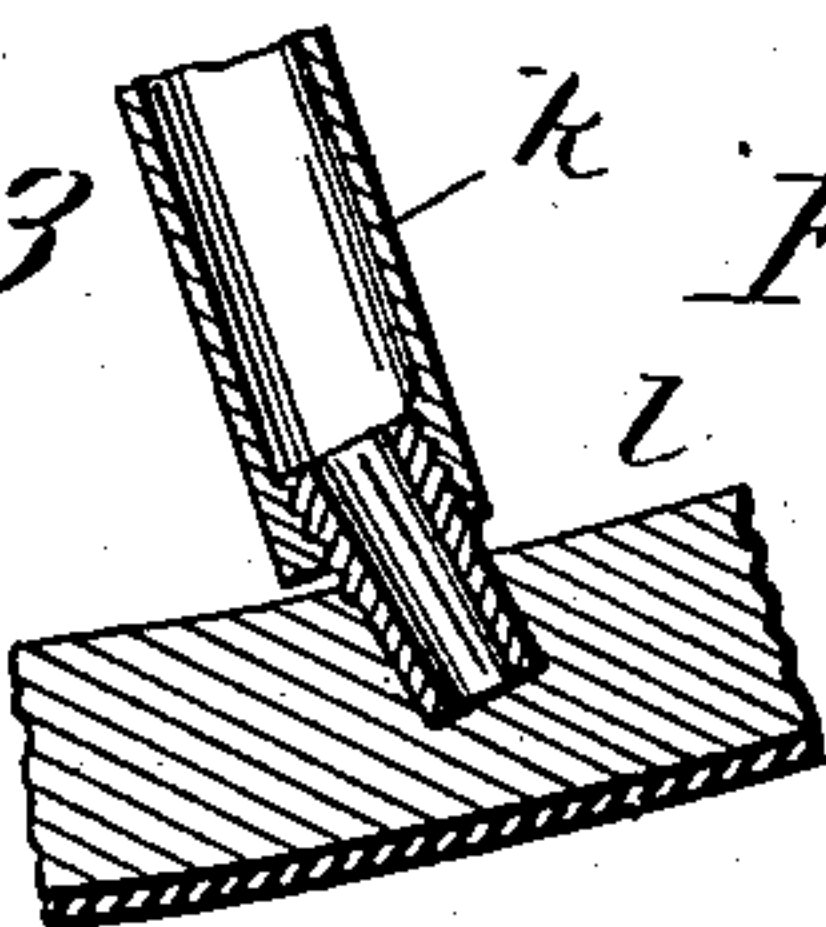
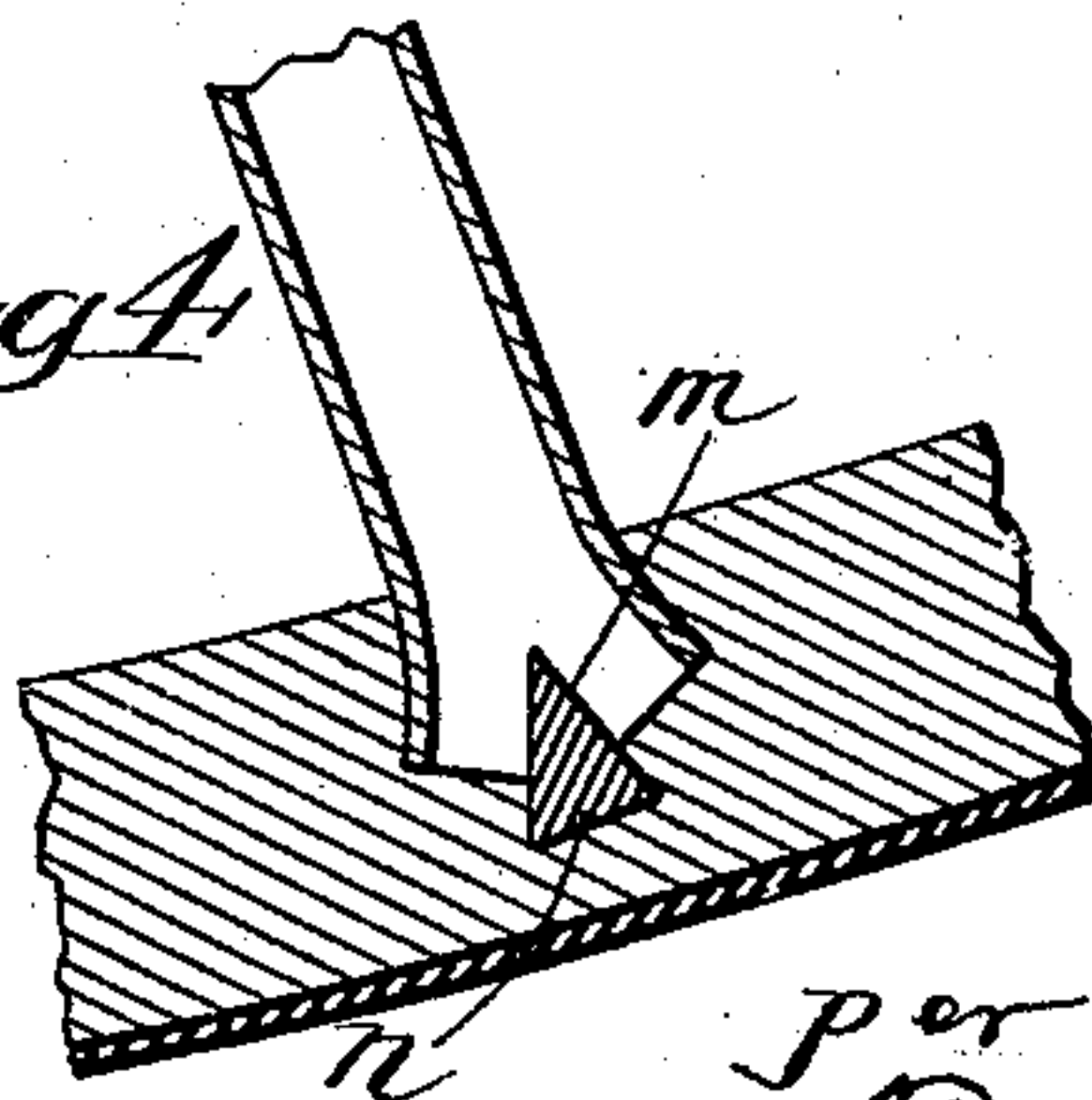


Fig 4



Attest:
Celestine

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Per
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UNITED STATES PATENT OFFICE.

EARLS I. FISK, OF ALMENA, MICHIGAN.

WHEEL-FELLY ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 508,927, dated November 21, 1893.

Application filed June 9, 1893. Serial No. 477,106. (No model.)

To all whom it may concern:

Be it known that I, EARLS I. FISK, a citizen of the United States, residing at Almena, in the county of Van Buren and State of Michigan, have invented certain new and useful Improvements in Wheel-Felly Attachments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has special reference to the fellies of vehicle wheels, and it is designed as an improvement on those devices whereby the felly is supplied with oil, which oil is adapted to fill the pores of the wood and thus render that portion of the wheel impervious to water and also incapable of being affected by the heat; and my object is to provide a device of this general character which will be more desirable and effective, and which can be readily applied to any wheel without specially constructing the felly.

To this end my invention consists in certain improved features of construction and combination and arrangement of parts all of which will be fully described hereinafter and finally embodied in the claims.

Referring to the accompanying drawings which illustrate my invention: Figure 1 represents a side elevation of a wheel equipped with my improvements; Fig. 2 a vertical section; Fig. 3 a section of a second species of my invention; Fig. 4 a detail perspective view showing a mode of fastening the device to the felly; Fig. 5 a view showing a modification.

The reference letter *a* indicates an ordinary vehicle wheel provided with the usual felly *b* and tire *c*. To this wheel my improvements are shown as applied.

My improvements consist of a tubular chamber or reservoir *d* formed preferably of metallic tubing and bent U-shaped, its arms having a normal spring tendency to diverge. The ends *e* of the reservoir *d* are bent out from the plane of the main portion at an angle of about thirty degrees, and are adapted to fit in the similarly arranged openings *f* in the wheel felly.

By this construction it will be seen that the outward tendency of the reservoir arms will serve to wedge the bent ends *e* into the inclined openings *f*, and thereby insure the secure seating of the reservoir. Formed in the bend of the reservoir is an opening *g* provided with a shoulder *h* having a packing ring or washer arranged thereon, and with a screw-cap *i* which is designed to screw into the opening *g* and to bind against the shoulder *h*. This forms an opening in the chamber by which it may be filled when required, and by means of the packing ring and screw cap, an air-tight sealing is provided.

In operation the reservoir is filled at the end with a suitable oil and its ends inserted in the openings *f* in the felly, whereupon the oil will be fed to the pores of the wood of which the felly is composed and gradually fill them. The effect of this is well-known and appreciated, as it tends to keep out the water and prevent the fellies from shrinking by heat. This is the preferred manner of manipulating the oiler, and the opening *g* and cap *i* are only shown as a varied or modified form which may if desired be used. The cap *i* is preferably tapering throughout its length so that it will make a tight fit in the hole *g*, and is provided at its upper end with a wing or stud by which it is screwed. This wing is of such a thickness that it may be embraced by the ears of an ordinary pocket-knife. Neither is it essential that the hole *g* be formed in the particular place shown, for it is obvious that it could be arranged in any part of the reservoir.

The varied form shown in Fig. 3 is adapted for use in connection with heavy vehicles, where it is desired to have a quantity of oil commensurate with the size of the wheel. To this end I employ a much larger pipe, such as *k* to form the body of the reservoir, while thimbles *l* are provided and screwed into the ends of the large pipe, after which their remaining ends are bent out as were the ends *e* in Fig. 2. This form is also provided with an oil-charging opening, and arranged in slanting or oblique openings in the felly as previously explained in connection with the device of Fig. 2.

I have also shown in Fig. 4 a substitute for the bent end of the reservoir. This consists in simply forming a tapering recess *m* in each

end of the reservoir and providing a wedge *n* which when arranged in the bottom of the opening in the felly and when the recessed ends *m* have been driven down on it, will
5 cause the said ends to bulge or spread out thereby locking them firmly in place. When this device is used, the ends are formed straight and used in connection with similar holes.

10 If the resiliency of the tube is not sufficient to securely hold the reservoir in place, a spring bar *o* may be arranged in the tube so that it will operate to throw the arms of the reservoir out and thereby aid them in binding
15 against the openings in the fellies. This is shown by Fig. 5.

Having thus described my invention, what I claim is—

20 1. A device for supplying oil to wheel fel- lies, consisting of a tubular receptacle bent so that its ends will occur about on the same plane with each other, said ends being adapted to fit into the felly and feed oil thereto, substantially as described.

25 2. A device for supplying oil to wheel fel- lies, consisting of a tubular receptacle bent so that its ends will occur on about the same plane with each other, said ends being adapted to fit into the felly and to feed the oil thereto, and a feed opening formed in the re-
30 ceptacle at a point between its ends by which it may be filled with oil, substantially as described.

35 3. A device for supplying oil to wheel fel- lies, consisting of a tubular receptacle formed of spring metal, and bent so that its ends will occur on about the same plane with each other, said ends being in turn bent outwardly and adapted to fit in correspondingly inclined openings in the felly whereby owing to the
40 spring tendency of the receptacle the device is held in place, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EARLS I. FISK.

Witnesses:

H. H. HILL,
C. H. SMITH.