

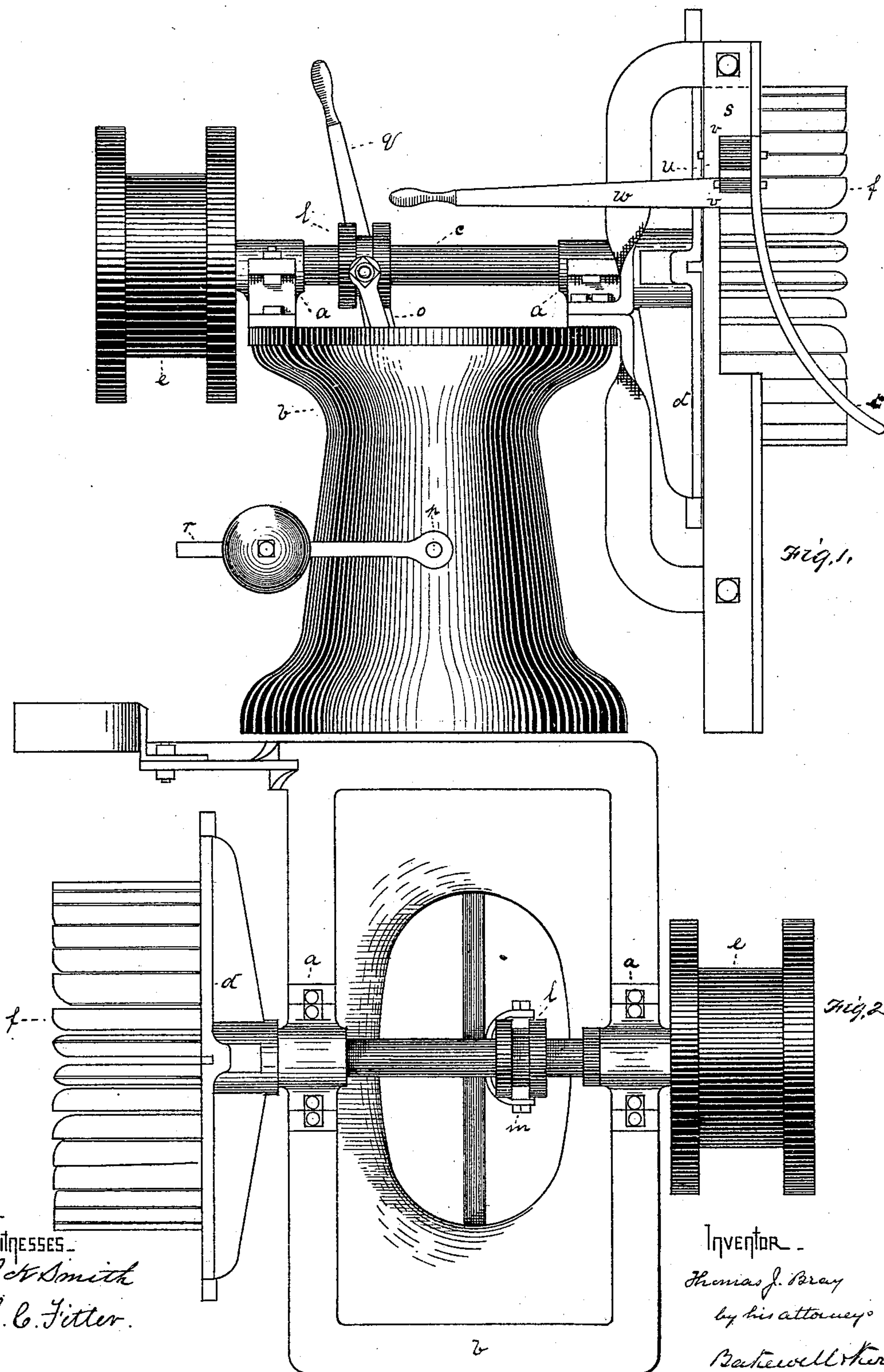
(No Model.)

2 Sheets—Sheet 1.

T. J. BRAY.
REEL FOR COILING WIRE.

No. 250,492.

Patented Dec. 6, 1881.



Witnesses.
J. C. Smith
L. C. Fitter.

Inventor.
Thomas J. Bray
by his attorney
Bakerwell & Co.

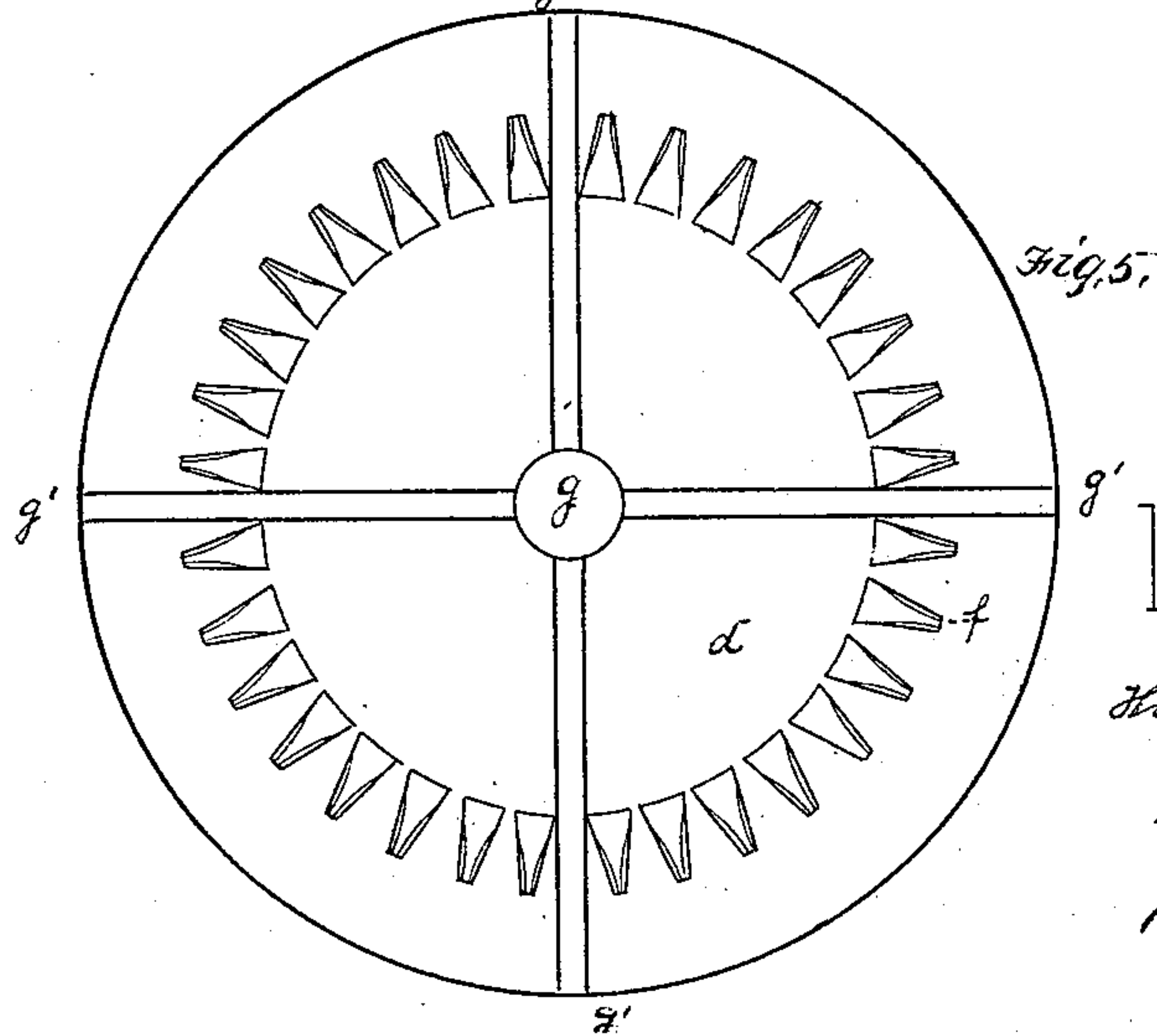
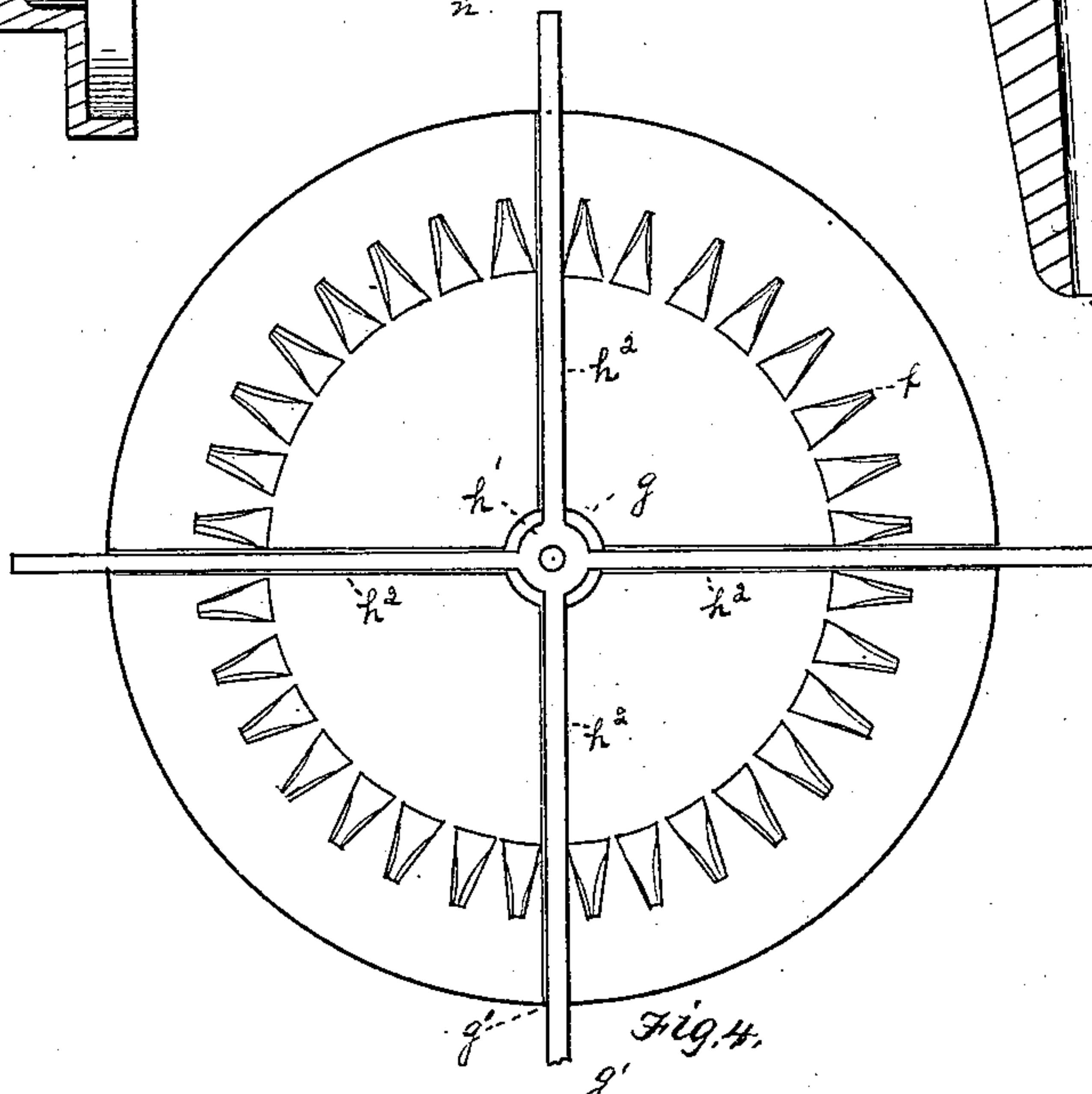
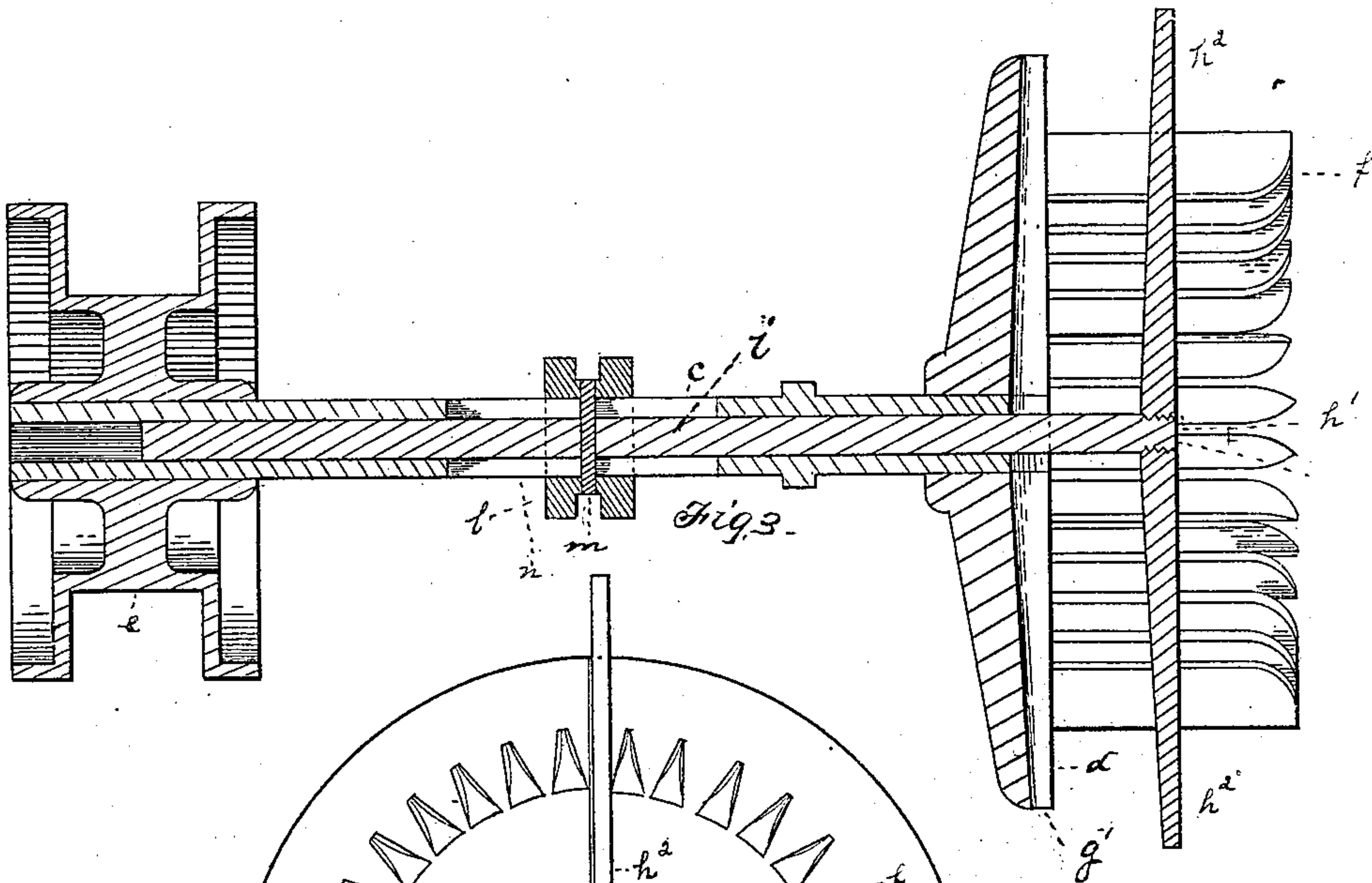
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Witnesses.
J. W. Smith
L. C. Fitter

Inventor.
Thomas J. Bray
by his attorney
Barnes & Co.

UNITED STATES PATENT OFFICE.

THOMAS J. BRAY, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO OLIVER BROTHERS & PHILLIPS.

REEL FOR COILING WIRE.

SPECIFICATION forming part of Letters Patent No. 250,492, dated December 6, 1881.

Application filed June 18, 1881. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. BRAY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Wire-Coiling Reels; and I do hereby declare the following to be a full, clear, and exact description thereof.

It has been my experience in the use of machines for coiling wire rods of the class having a face-plate and a series of radially-arranged coil-pins and a stripping device that any projection beyond the plane of the face-plate, or a tapering construction of coil-pin, has a tendency to bend and throw off the end of the rod, especially if it is a steel rod and somewhat cold. This is extremely dangerous to the operator who feeds the machine, as he is very liable to be struck by the end of the rod. I have found another objection to such machines. The reels are designed to run continuously, and the rod is fed in while the reel is in motion. Often a rod will enter the pins but fail to take hold, in which case the operator, letting go of the rod outside of the pins, will strike its end inside of the pins with his tongs to bend it around one of the pins, so that it may take hold and be reeled up. Any projection on the face-plate inside of the pins is liable to deflect the tongs against and cause them to catch on the pins, wrenching them from the hands of the workman and throwing them off, thereby exposing him and others to great danger.

My invention is designed to obviate all danger from this cause by removing from the face-plate all projections except the coil-pins, and yet retaining in the machine the necessary stripping device.

To enable others skilled in the art to make and use my invention, I will now describe it by reference to the annexed drawings, in which—

Figure 1 is a side elevation of my improved reel. Fig. 2 is a plan. Fig. 3 is a longitudinal section of the reeling device, stripper, and shaft. Fig. 4 is a front view of the face-plate. Fig. 5 is a view of the face-plate without the stripper.

Like letters of reference indicate like parts in each.

Mounted in suitable bearings, *a*, on a bed or *b*, is a hollow shaft, *c*, on one end of which is the face-plate *d*, and on the other the

driving-pulley *e*. The face-plate *d* is provided with the usual circle of coil-pins *f*. In this case the pins *f* are in shape in cross-section like truncated cones with concave sides, but the edges of separate pins are parallel. The face-plate *d* is also provided with round central recess, *g*, and four grooves, *g'*, extending radially from the end of the hollow shaft *c* to the periphery of the face-plate. The recess and grooves are of sufficient depth to receive the stripper, so that it shall lie flush with the surface of the plate *d*.

The stripper *h* consists of a center boss, *h'*, and four radial arms, *h''*, and is mounted on the end of a rod, *i*, which extends through the hollow shaft *c*, and is capable of a longitudinal movement therein by means of a grooved collar, *l*, which is secured to it by a screw, *m*, extending through it and the collar and moving in the slots *n* in the sides of the hollow shaft *c*. These slots *n* are of sufficient length to permit the stripper *h* to cast the coil of wire off of the pins *f*. The stripper is actuated by a bifurcated arm, *o*, mounted on a shaft, *p*, and operated by a lever, *q*. A weighted arm, *r*, on the shaft *p* retracts the stripper when the lever *q* is released.

At the side of the machine is a frame, *s*, sustaining a guard, *t*, in which is the feed-opening *u*, provided with friction-rollers *v*, one of which is mounted on a pivoted lever, *w*, for the purpose of putting a tension on the rod when being reeled, in order to take out the kinks and give it a good finish.

The operation of my machine is similar to others of its class. The wire rod is grasped by the tongs of the operator and the end stuck through the feed-opening *u* in among the revolving pins, which engage it and reel up the rod. The coil thus made is thrown off the pins by the stripper *h*, which is drawn forward by the lever *q*. The form of the stripper may be varied; but it must be of such construction as to force the coil off the pins, and as will fit in grooves or recesses in or on the face-plate, flush with or inside of the plane of the face-plate.

My reel is efficient and safe in operation. It may be operated by hand or by power.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a reel for coiling wire, the combina-

tion, with a face-plate having a circle of coil-
pins concentric with the shaft, and provided
with radially-arranged stripper-grooves, of a
stripper whose axis coincides with that of the
5 face-plate, said stripper being fixed to a shaft
capable of endwise motion, and having radi-
ally-arranged rigid arms which correspond to
and are received into the radial stripper-
grooves of the face-plate, substantially as and
10 for the purpose specified.

2. The combination, with the face-plate hav-
ing radial stripper-grooves and the radial

stripper-arms mounted on a shaft having an
endwise motion in the axis of the face-plate,
of the counterweighted rock-shaft having a 15
hand-lever and a bifurcated arm for actuating
the stripper, substantially as and for the pur-
pose specified.

In testimony whereof I have hereunto set
my hand this 14th day of June, A. D. 1881.

THOS. J. BRAY.

Witnesses:

JOHN S. KENNEDY,
JAMES A. CARLIN.