W. J. McKEE.

SAND PUMP REEL.

No. 191,358. Patented May 29, 1877.

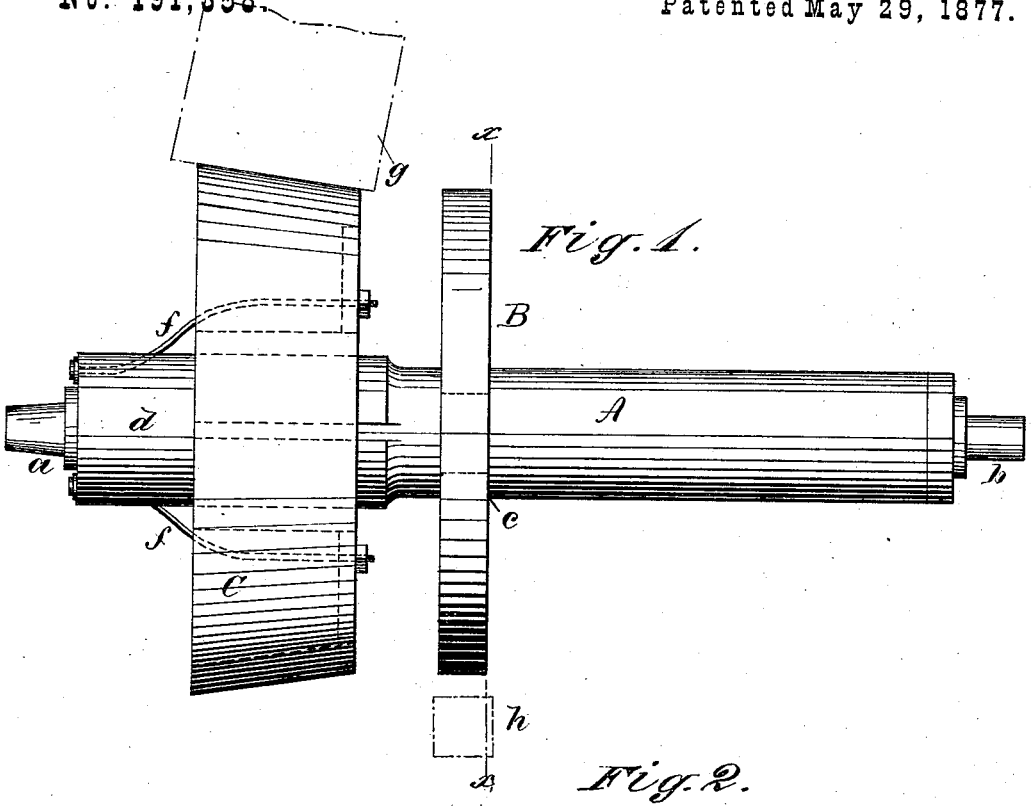
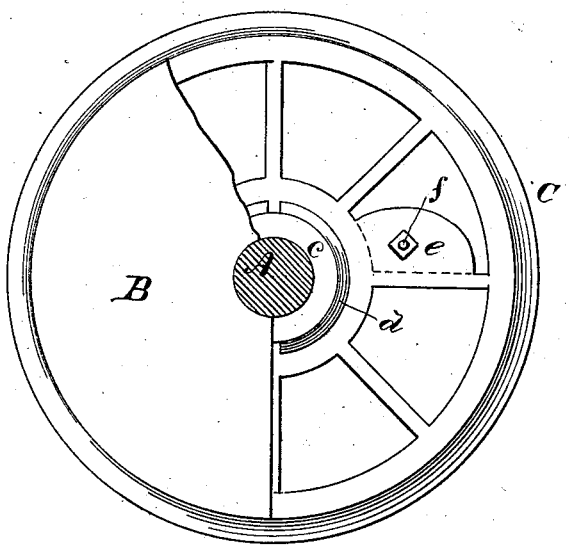


Fig. 1.

Fig. 2.



WITNESSES:

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WILLIAM J. McKEE, OF PETROLIA, PENNSYLVANIA.

IMPROVEMENT IN SAND-PUMP REELS.

Specification forming part of Letters Patent No. **191,358**, dated May 29, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, WILLIAM J. McKEE, of Petrolia, in the county of Butler and State of Pennsylvania, have invented a new and Improved Sand-Pump Reel, of which the following is a specification:

In the accompanying drawing, Figure 1 is a side elevation of my improved sand-reel. Fig. 2 is a transverse section of the same on line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the drawing, A is a wooden shaft, of such diameter and length as may be required, having at one end a tapering gudgeon, *a*, and at the other end the gudgeon *b*. A groove, *c*, is cut in the shaft A to receive the brake-wheel B, which consists of a number of pieces of plank that are nailed or screwed to each other, and also to the shaft A. A portion, *d*, of the shaft is tapering, and is slotted upon opposite sides to receive the splines in the wheel C. The wheel C is made of cast-iron, and its central opening is slightly conical to fit the tapering portion of the shaft A. The rim of the said wheel is beveled and made slightly concave, to correspond with the convexity of the belt-wheel, in contact with which it runs.

Upon two of the spokes of the wheel C ears *e* are formed for receiving rods *f*, which are secured to the flange of the gudgeon *a*. By means of the nuts on the threaded portion of these rods the wheel C may be drawn upon the tapering portion of the shaft A as tightly as may be desired.

The friction-wheel B may be placed upon either side of the driving-wheel, as may best suit the machinery in connection with which it is used.

The shaft A is set at an angle with the shaft by which it is driven, and the gudgeon *a* is placed in a movable box, while the gudgeon *b* is placed in either fixed or pivoted box. A rope is wound upon the shaft A by moving the boxes of the gudgeon *a* until the wheel C is forced into contact with a belt-wheel, *g*, (a portion of which is shown in dotted lines, Fig. 1,) which is driven from the engine.

The motion thus imparted to the shaft winds the rope so as to raise the sand-pump.

When the sand-pump is lowered into the well, the wheel C is removed from the wheel *g*, and, if it descends too rapidly, its motion may be checked by drawing the shaft A back until the brake-wheel B strikes the check or friction post *h*. (Shown in dotted lines in section in Fig. 1.) By this arrangement the unwinding of the rope may be perfectly controlled.

In some cases the brake-wheel B may be dispensed with, and the motion of the shaft may be controlled by drawing the wheel C against a properly-arranged check-post.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The drive-wheel C of a sand-pump reel, having rim, spokes, and hub in one piece, and provided with ears *e*, rods *f*, and nuts at the end of rods, as and for the purpose specified.

WILLIAM J. McKEE.

Witnesses:
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