

(No Model.)

A. C. FRENCH.
DERRICK DRUM.

No. 483,052.

Patented Sept. 20, 1892.

Fig. 1

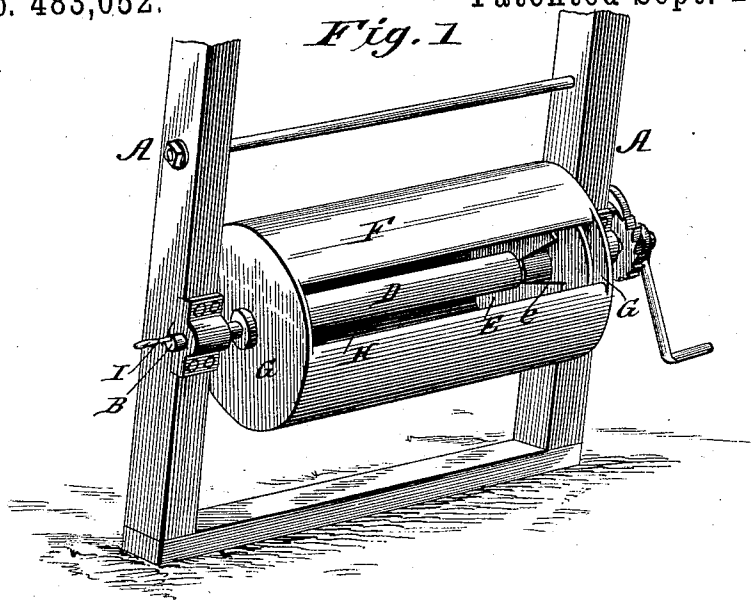


Fig. 2

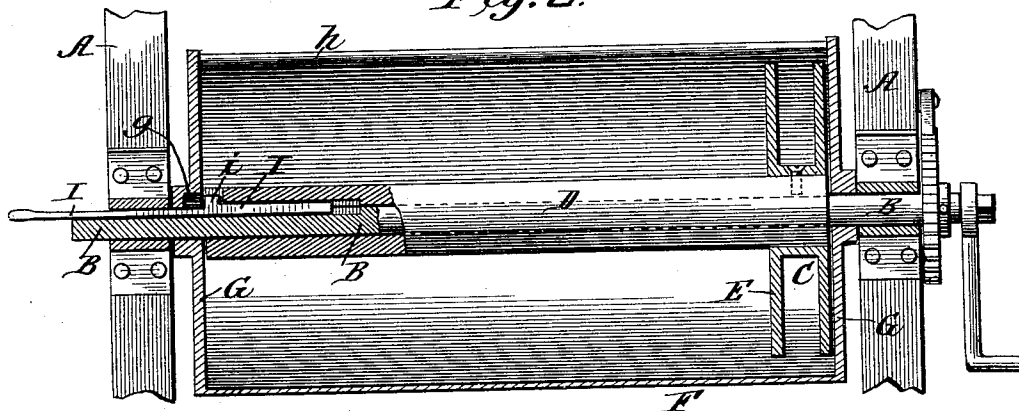
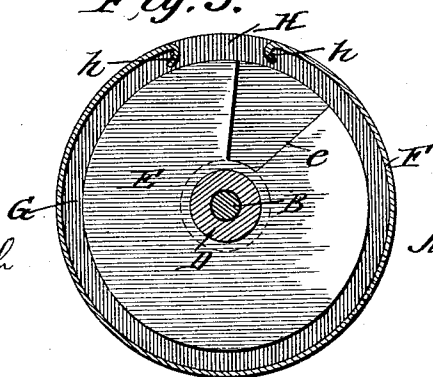


Fig. 3



WITNESSES:

Fred G. Dreterch

P. B. Turpin

INVENTOR:

Adams C. French

BY *Munn & Co*

ATTORNEYS

UNITED STATES PATENT OFFICE.

ADAMS C. FRENCH, OF RAPID CITY, SOUTH DAKOTA.

DERRICK-DRUM.

SPECIFICATION forming part of Letters Patent No. 483,052, dated September 20, 1892.

Application filed January 9, 1892. Serial No. 417,584. (No model.)

To all whom it may concern:

Be it known that I, ADAMS C. FRENCH, of Rapid City, county of Pennington, and State of South Dakota, have invented a new and
5 Improved Drum for Derricks and the Like, of which the following is a full, clear, and exact description.

My invention is an improvement in derricks; and it consists particularly in the construction, combination, and arrangement of parts forming the drum, as will be hereinafter more fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective
15 view of the improvement. Fig. 2 is a longitudinal section, and Fig. 3 is a cross-section.

The derrick-frame may be of ordinary construction, portions A thereof being shown and not requiring any detailed description. The drum-shaft B is journaled in suitable bearings on the frame and supports the drum, which includes the drum proper and the supplemental drum or casing inclosing the drum proper.

25 The drum proper is formed at one end with a receiving portion or section C to receive the surplus cable and adjoining said receiving portion with the main or windlass portion D, on which the strongest pulling is done. The
30 flange or plate E, separating the receiving and windlass portions, is provided with a slot *e*, through which the cable may be passed when it is desired to direct it from the receiving onto the windlass portion. By providing the
35 receiving portion larger quantities of the cable may be held on the drum and the desired length be paid out for any particular purpose. Then the winding and unwinding may be done upon the windlass portion, so avoid-
40 ing the frictional wear upon the collected rope on the receiving portion.

Over the drum proper is fitted the supplemental drum F, which is in the nature of a hollow cylinder having its head G provided
45 with openings for the shaft B, so that the supplemental drum or case may turn upon the shaft. This drum or case F has a longitudinal slot or opening H, extended from head to head, the side walls of which slot are turned
50 at *h* to form a rounded surface, against which the rope may bear as it passes out the slot and around the supplemental drum or casing.

Keying devices are provided, whereby the drum proper is keyed to the shaft, and also for
keying the supplemental drum to the shaft 55 when desired. In the construction shown the key I slides in a keyway in the shaft and drum proper, so that the drum proper is keyed to the shaft at all times. On the key I is a projection
60 *i*, which may be set into a notch *g* in the head of the drum F, and so key such drum G to the shaft, when desired. The drum F may thus be used as a drum-surface, so that when it is desired to use a large drum the cable can be run
65 out of the slot H and around the part F. Another and an equally important function of the drum or core F is that it may be adjusted with the slot H down, and so serve as a shelter or casing for the cable on the drum proper,
70 protecting the same from snow, rain, &c. It will thus be seen that I provide a drum formed of two concentric sections, one larger than the other and the larger arranged to receive the cable from the smaller section. In such
75 construction the drum proper forms the inner section and the case F the outer section, and while the construction as shown is much preferred it will be understood that I do not desire to be limited in the broad features of my invention to such specific construction. 80

While the drum is shown in connection with a derrick, it will be understood that I do not desire to be limited to such use, as the drum will be found useful in stump-pullers and other pulling and hoisting machines. 85

Manifestly the receiving portion of the drum proper may be made of the same diameter as the windlass portion, as shown, or larger or smaller, as may be desired.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 90

1. In an apparatus, substantially as described, the combination of the shaft provided with a keyway, the drum proper fitted
95 on the shaft, the outer drum or case fitted over the drum and shaft and provided with a notch or seat *g*, and the key sliding in the keyway in the shaft for securing the drum proper and provided with a projection *i*, movable into and out of the notch *g* in the outer drum, all substantially as and for the purposes set forth. 100

2. The improved drum herein described,

consisting of the shaft, the drum proper fitted on and keyed to the shaft, the outer drum or case fitted over the drum proper and provided in its side with an opening H and having the walls or edges of said opening bent or curved inward and the key sliding in a keyway in the shaft for securing the drum proper and having a portion movable into and out of engagement with the outer drum, whereby the latter may be keyed to turn with the shaft, substantially as and for the purposes set forth.

ADAMS C. FRENCH.

Witnesses:

P. B. TURPIN,
H. J. ROBINSON.