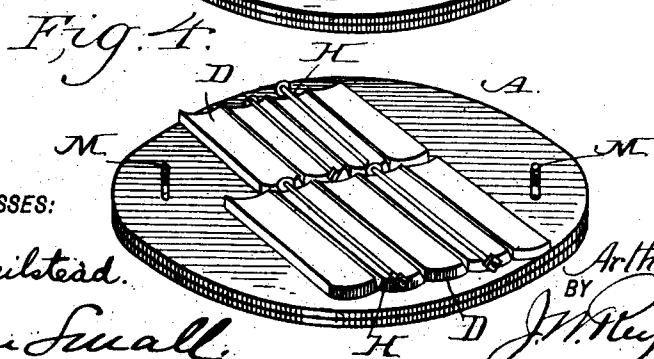
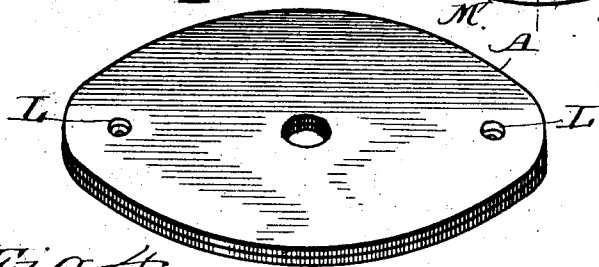
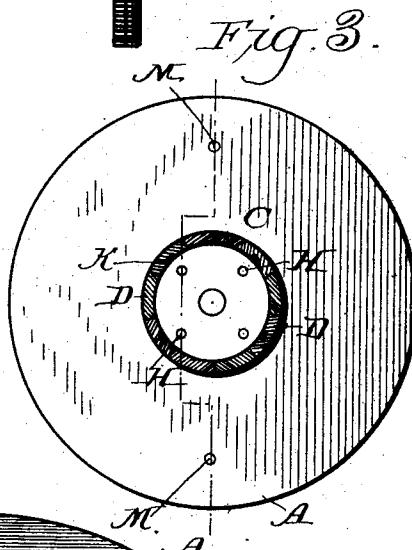
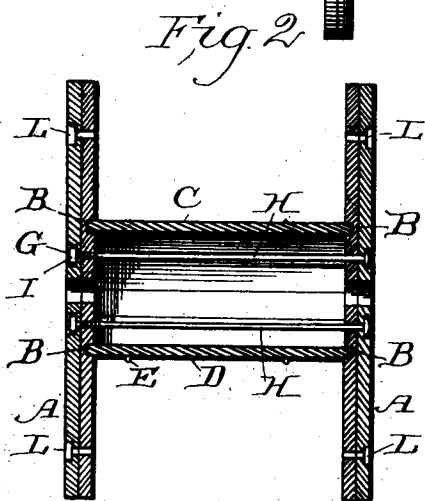
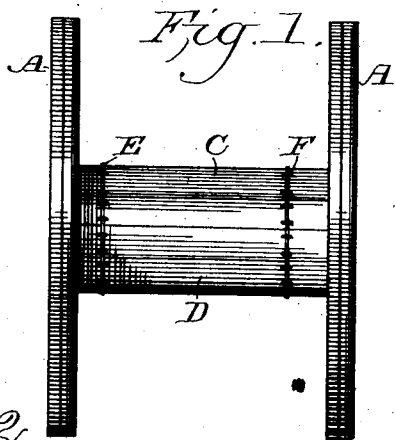


(No Model.)

A. D. BENHAM.
WIRE ROPE DRUM REEL.

No. 503,227.

Patented Aug. 15, 1893.



WITNESSES:

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ARTHUR D. BENHAM, OF CHICAGO, ILLINOIS.

WIRE-ROPE DRUM-REEL.

SPECIFICATION forming part of Letters Patent No. 503,227, dated August 15, 1893.

Application filed June 23, 1892. Serial No. 437,708. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR D. BENHAM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wire-Rope Drum-Reels; 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.

This invention has for its object to provide an improved knock down reel for storing and transporting cables, wire and other like articles, being especially designed to furnish a reel for electric wires and cables, upon which they may be conveniently transported and from which they may be supplied for use as occasion requires.

The reels, heretofore employed for wires and cables of this class, especially when heavy, have to be substantially constructed and are expensive, making it an object to provide for re-using such reels after the wire has been run off. A serious difficulty in the way of such use is found in the bulky nature of the reels as ordinarily constructed, rendering the handling of the same, when emptied, and their transportation when in this condition an item of considerable expense.

My invention is designed to obviate these difficulties, and to furnish a knock-down reel, the parts of which may be assembled and put together, substantially, when required for use, and taken down when the reel is emptied, and packed together in a small compass for transportation as more fully hereinafter specified.

The above mentioned objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of my improved reel with the parts thereof assembled. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is an inner face view of one of the heads of the reel, and Fig. 4 a perspective view showing the parts in position for transportation or storage.

Referring to the drawings the letter, A, indicates the heads of the reel, which are con-

structed of circular disks of suitable size cut from boards of proper width. Each head is composed of two disks having the "grain" of the wood crossed at right angles and placed face to face, together, the adjoining faces being cemented together by means of glue or cement and nailed, bolted or otherwise additionally secured. The inner face of each head is provided with an annular concentric groove, B, cut to a proper depth in the inner disk, but not entirely through it. The outer circumference of these grooves is equal to the circumference of the drum or body of the reel, and the width of the grooves is equal to the thickness of the sections composing the drum. The letter, C, indicates said drum which is constructed of segmental sections, D, of sufficient number, which are beveled at their adjoining edges, in a manner similar to the staves of a barrel, so as to set properly together when the parts of the reel are assembled. The sections are connected on their outer sides by means of wires E, which are fastened thereto by means of staples, F, or otherwise, so that the whole may be spread out, without separation, as indicated in the drawings, in order that they may be placed between the two heads for transportation. The said sections are slightly curved so that when set up they will assume the form of a cylinder the ends of which will fit and be held in the annular grooves in the heads. Within the circle of the grooves, are formed, at suitable intervals countersunk apertures, G, for the bolts, H, which extend through the opposite heads and drum when the parts are assembled, furnishing with their heads and nuts, I, a means for securely fastening the assembled parts together, as shown in Figs. 1 and 2 of the drawings. A suitable number of the sections of the drum, are provided on their inner sides with longitudinal grooves, K, in which the bolts, H, are placed as shown in Fig. 4 when the parts are knocked down for packing, and confined during transportation or storage by the heads of the reel. The heads are also provided with countersunk apertures, L, for the short headed bolts, M, by which they are clamped together with the sections between them when the parts are put up for storage or transportation.

The method of using my invention will be

apparent from the above description in connection with the drawings.

It will be seen that the parts when set up are securely and substantially fastened by the bolts, H, forming a strong reel which will meet all the requirements incident to rough handling, and that when "knocked down" and packed the parts will occupy comparatively little space, thus materially lessening the trouble and cost of transportation.

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

1. The combination in a knock-down reel of the detachable heads having annular grooves on their inner faces the drum composed of connected segmental sections, and the bolts

whereby the parts are clamped together when assembled substantially as specified.

2. The combination in a reel of the annularly grooved heads, the segmental drum sections arranged together "edge to edge" connecting wires and staples F, by which the segments are held together when the parts on the drum are disassembled, and the bolts by which the assembled parts are clamped together substantially as specified.

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

ARTHUR D. BENHAM.

Witnesses:

LAWRENCE MILSTEAD,
WILLIAM SMALL.