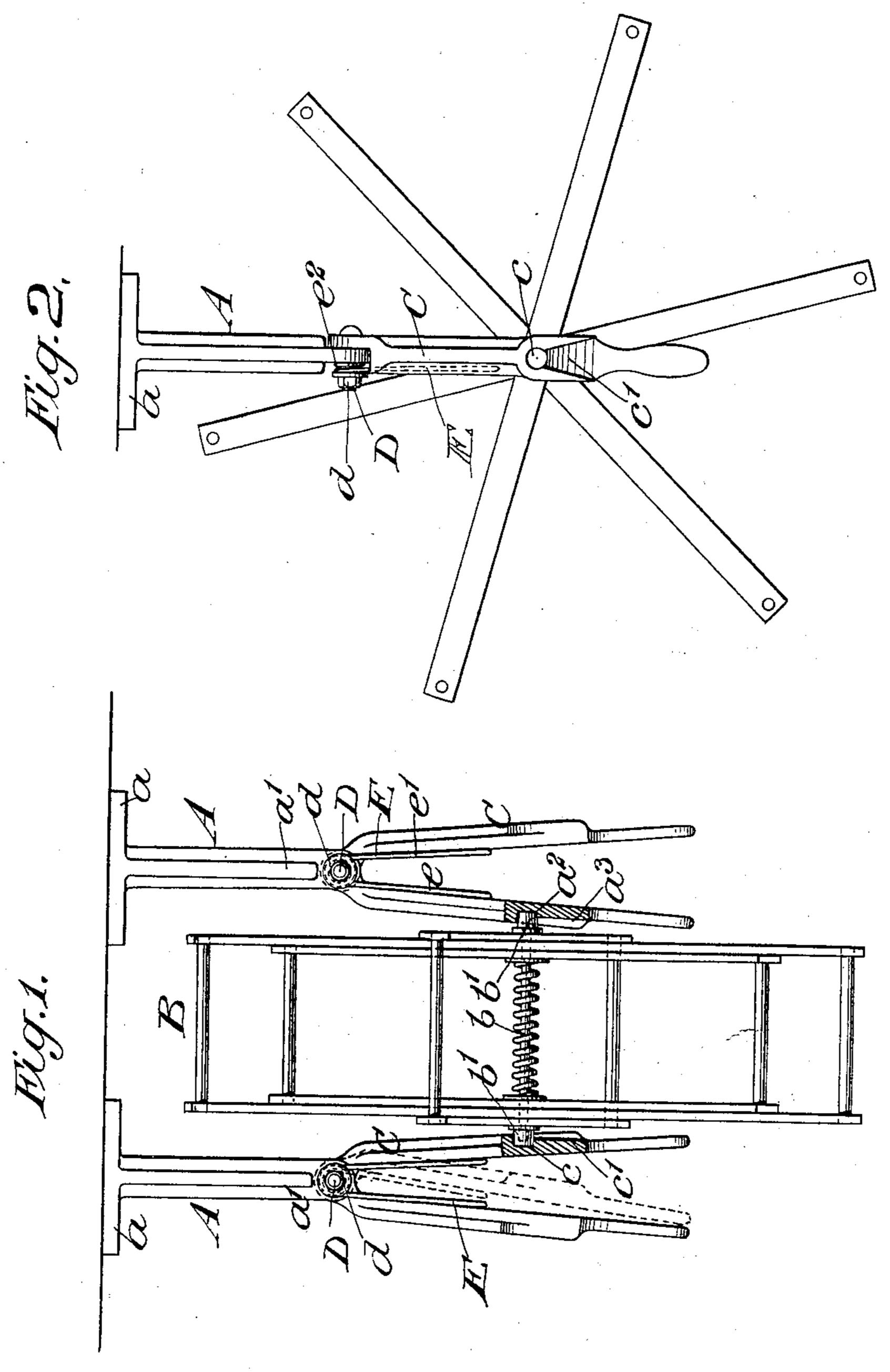
No. 611,020.

Patented Sept. 20, 1898.

## I. E. PALMER. REEL AND SUPPORT.

(Application filed May 20, 1897.)

(No Model.)



Witnesses:-George Barry Jr. Edward View.

Inventor Isaas & Palmus by attorneys

## United States Patent Office.

ISAAC E. PALMER, OF MIDDLETOWN, CONNECTICUT.

## REEL AND SUPPORT.

SPECIFICATION forming part of Letters Patent No. 611,020, dated September 20, 1898.

Application filed May 20, 1897. Serial No. 637,329. (No model.)

To all whom it may concern:

Be it known that I, Isaac E. Palmer, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new 5 and useful Improvement in Reels and Supports Therefor, of which the following is a specification.

This invention relates to certain improvements in reels and their supports, in which 10 the reels may be quickly and readily inserted into their supports and may be as easily removed therefrom, the said reels when mounted within the supports being held so as to freely rotate therein, all liability of the said 15 reels becoming displaced being obviated.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents a top plan view, partly 20 in section, of two of the reel-supports and a reel mounted in position therein, one of the swinging arms of the supports being shown in dotted lines swung back to show the manner of permitting the release of the reel from 25 the supports; and Fig. 2 is a side view of the

support and reel.

The reel-supports are denoted by A, and the reel, which is mounted to rotate between the reel-supports, is denoted by B. The reel-30 supports A are adapted to be secured to a suitable foundation in series, so as to permit the reception of a number of reels between them. The support A consists of a suitable flanged base a, from which extends outwardly 35 a rigid or stationary arm a', one face of the arm a', near its outer end, being provided with a socket or recess  $a^2$  for the reception of the enlarged end bearing upon one end of the spindle b of the reel B. A converging 40 guide or track  $a^3$  extends from near the end of the arm a' into communication with the socket or recess  $a^2$  for the purpose of guiding the end of the spindle b upon the reel into its position within the said socket.

A spring-actuated swinging arm C is hinged to the stationary arm a' at a point between its outer and inner ends, so as to swing toward and away from the said rigid arm. The means which I have shown for hinging the 50 swinging arm C to the fixed or stationary arm a' consists of a pivot-bolt D, which passes through portions of the two arms and is pro-

vided with a suitable retaining-nut d. The arm C is yieldingly held at the limit of its movement away from the outer end of the 55 stationary arm by means of a spring E, which spring is coiled around the bolt D and has its forwardly-extended ends e e' the one engaged with the arm a' and the other with the arm C. The coiled portion  $e^2$  of the spring is held in 60

position by the nut d upon the bolt D.

The face of the swinging arm C opposite the face of the fixed arm upon the next adjoining support is provided with a recess or socket c for receiving and retaining the op- 65 posite end of the spindle b of the reel from the end which enters the socket  $a^2$  in the fixed arm of the next succeeding support. The arm C is further provided with a converging groove, guide, or track c', extending from the 70 outer portion of the said swinging arm into communication with the recess c, for guiding the end of the spindle B into its position within the socket. The opposite ends b' of the reel-spindle b are considerably enlarged and 75 are round in cross-section and correspond in diameter closely to the diameters of the sockets  $a^2$  and c, so as to have an easy rotating fit within the said sockets. These enlarged end portions or heads of the spindle permit 80 of the reel being rotated with a very even and smooth movement at a great speed, with no liability of the reel jumping out of its position within its supports.

By constructing the reel-supports as above 85 described any one of the reels may be quickly removed from its supports by swinging back one of the swinging arms C without disturbing in any manner the adjacent reels or supports.

By forming the guides  $a^3$  and c' in the faces of the arms the spindle is readily guided into its position within the sockets when it is desired to insert the reel into its supports.

It is evident that slight changes may be 95 resorted to in the construction, form, and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but 100

What I claim is—

1. A reel-support comprising a stationary arm having a socket in its outer face for receiving one end of a reel-spindle, a swinging arm hinged to the stationary arm and having a socket in its outer face for the reception of the end of an adjacent reel-spindle and means for yieldingly holding the swinging arm at the limit of its movement away from the stationary arm, substantially as set forth.

2. A reel-support comprising a stationary arm and a spring-actuated swinging arm hinged thereto held normally at the limit of its movement away from the stationary arm,

...

the said arms having sockets upon their opposite faces for the reception of the adjacent ends of two reel-spindles, the said arms being further provided with guides or tracks for directing the ends of the spindles into position 15 within the sockets, substantially as set forth.

ISAAC E. PALMER.

Witnesses:

FREDK. HAYNES, EDWARD VIESER.