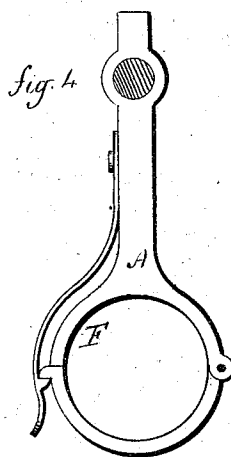
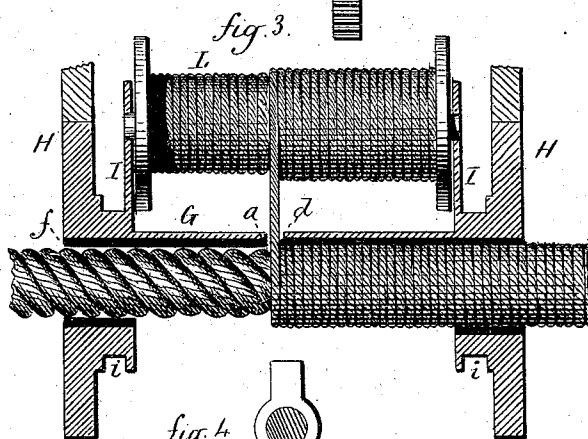
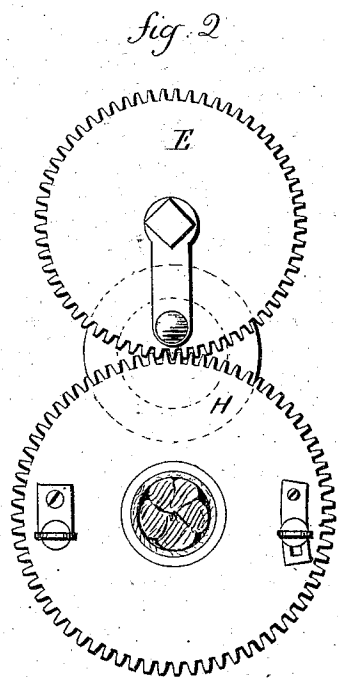
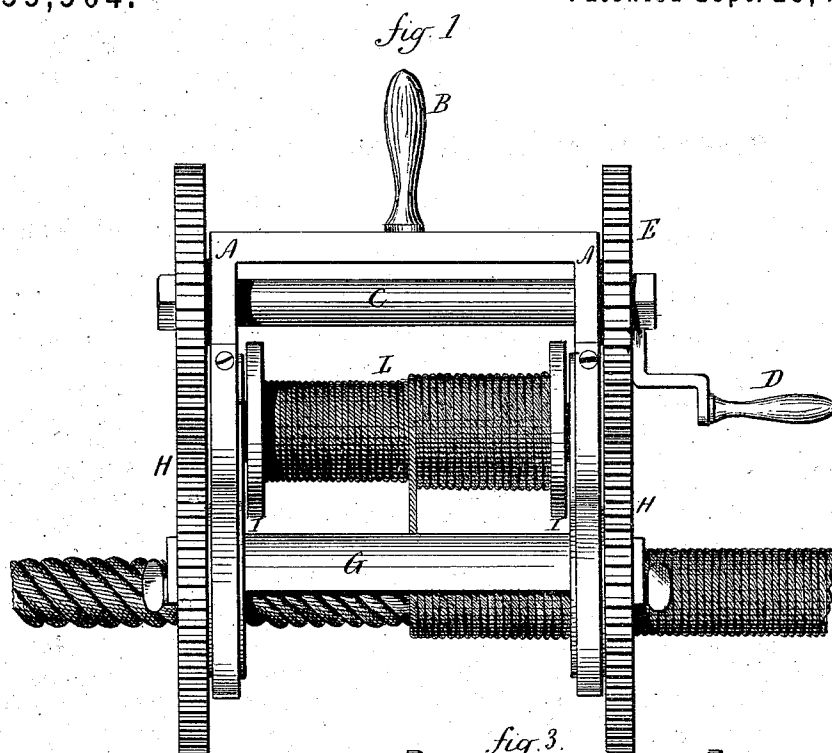


J. A. DAYTON.
Rope-Serving Apparatus.

No. 155,504.

Patented Sept. 29, 1874.



Witnesses
J. H. Shumway
A. J. Lick

Jos. A. Dayton
Inventor
By atty.
Wm. E. Earle

UNITED STATES PATENT OFFICE.

JOSEPH A. DAYTON, OF NEW LONDON, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO PHILO D. ATWOOD, OF SAME PLACE.

IMPROVEMENT IN ROPE-SERVING APPARATUS.

Specification forming part of Letters Patent No. **155,504**, dated September 29, 1874; application filed May 25, 1874.

To all whom it may concern:

Be it known that I, JOSEPH A. DAYTON, of New London, in the county of New London and State of Connecticut, have invented a new Improvement in Machine for Serving Ships' Rigging; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, an end view; Fig. 3, a longitudinal section of the rotating apparatus removed from the frame; and in Fig. 4, an end view of the frame with the rotating apparatus removed.

This invention relates to mechanism for serving ropes or ships' rigging—that is to say, winding their surface with “spun yarn”—the object being the construction of an apparatus which will perform the labor with much greater rapidity than can be done by the usual hand process; and the invention consists in a rotating sleeve, wholly or partially surrounding the rope, combined with a spool carrying the spun yarn, and a mechanism causing the said spool to revolve around the rope, and wind the yarn from the spool onto the rope, and a sleeve to adjust the device to ropes of different diameters, as more fully hereinafter described.

A is the frame, provided with a handle, B, for convenience of use, and with a driving-shaft, C, arranged longitudinally therein, and caused to revolve by a crank, D, or otherwise. The crank is here represented as attached to a pinion, E, on one end of the shaft. Below this shaft C a bearing, F, is made, (see Fig. 4,) to receive the sleeve G, and so as to allow it to revolve freely therein. In connection with this sleeve is a gear, H, upon one or both ends, into which the corresponding pinions E on the shaft C work, so that, holding the frame by the handle B, and turning the crank, the sleeve G will be made to revolve. On the sleeve G is a pair of uprights, I, carrying the spool L, as seen in Fig. 3, the bearings of the sleeve in the frame being in the grooves *i* of

the sleeve. The rope to be served is passed through the sleeve, as seen in Figs. 1 and 3, and secured at both ends in the usual manner for serving by hand. The operator then attaches the free end of the spun yarn from the spool to the rope, and, holding the apparatus by the handle B, causes the spool L to revolve around the stationary rope, and wind the yarn firmly thereon.

In order that the apparatus may feed itself, and at the same time to force the yarn close together, I form a shoulder, *a*, in the sleeve, directly beneath the perforation *d*, through which the yarn passes to the rope, and against which the yarn is wound; hence, this shoulder following the yarn around and around, the rope will force the apparatus forward accordingly.

That the same apparatus may be used for different-sized ropes, I introduce a lining or bushing within the sleeve, the internal diameter of which corresponds to the rope to be served, the external diameter corresponding to the internal diameter of the sleeve G; hence, by using sleeves of different internal diameters, according to the size of the rope, the apparatus may be used for serving different sizes of ropes.

As a convenience for removing the apparatus from the rope at any time, the wheels H are divided, as seen in Fig. 2, and the sleeve made to only half surround the rope, and that half attached to the portion which carries the spool.

The bearing in the frame A for the spool is also divided, as seen in Fig. 4; hence, by opening the bearing and the gears H, the apparatus may at any time be taken from the rope.

I claim as my invention—

In an apparatus for serving ships' rigging, substantially such as described, the internal removable sleeve, for the purpose of adapting the device to serving ropes of different diameters.

JOSEPH A. DAYTON.

Witnesses:

A. J. TIBBITS,
J. H. SHUMWAY.