D. SCATTERGOOD.

Steering-Gear for Vessels.

No. 163,890. Patented June 1, 1875.

Fig. 1

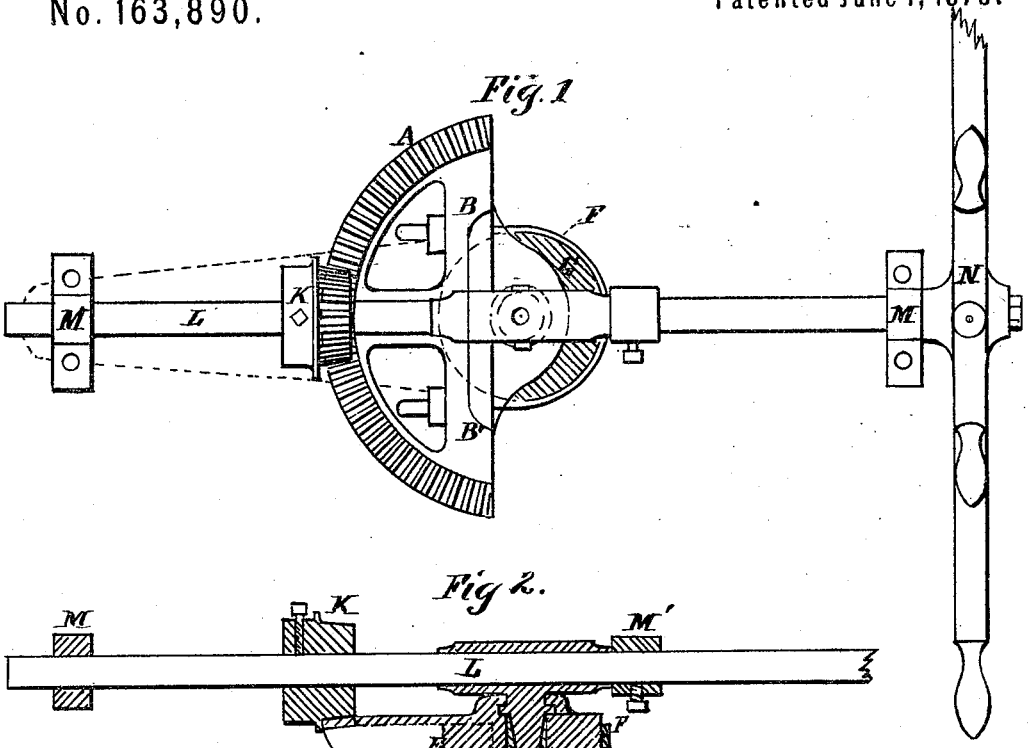


Fig 2.

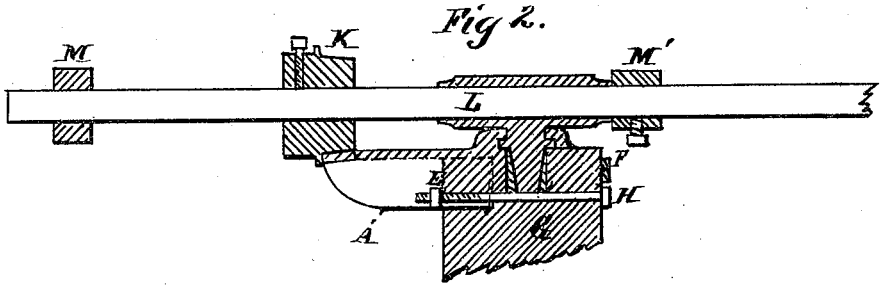


Fig 3.

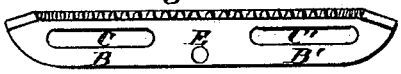
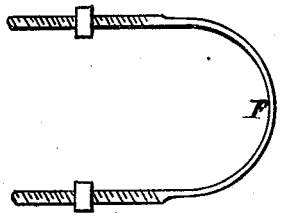


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID SCATTERGOOD, OF BEVERLY, NEW JERSEY.

IMPROVEMENT IN STEERING-GEARS FOR VESSELS.

Specification forming part of Letters Patent No. **163,890**, dated June 1, 1875; application filed December 12, 1874.

To all whom it may concern:

Be it known that I, DAVID SCATTERGOOD, of Beverly, in the county of Burlington, in the State of New Jersey, have invented a new and useful improvement in steering apparatus for sailing and other vessels; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and letters of reference marked thereon.

The nature of my invention consists in so constructing a segment of beveled wheel, with slotted apertures, that it may be readily applied and securely fastened to rudder-posts of different diameters, and when fastened be operated by a beveled pinion and windlass, so that the motion of the rudder is the same relatively to the motion of the steering-wheel or windlass as it is to a helm or tiller.

Figure 1 shows a plan of this invention; Fig. 2 a section, and Fig. 3 a front elevation, of the beveled segment, and Fig. 4 a plan of the strap-bolt for fastening the segment to the rudder-post.

The same letters of reference apply to the same parts in the several figures.

The drawing shows the invention on a scale of three inches per foot.

A represents a segment of a beveled-toothed wheel of less than a half-circle. The arms B B′, which form a chord to the arc, are slotted at C and C′, and a central hole, E, is formed in it with a pocket, in which a nut may be inserted. A strap-bolt, F, made flat and flexible, so that it may be bent cold to make it conform to the shape and size of the head of the rudder-post G, has the ends passed through the slots C and C′, and is there secured by nuts. The side of the rudder-posts, to which the segment is applied, is dressed off flat so that the center of the arc of teeth coincides with the center of motion of the rudder-post G. When it is inconvenient to use the strap-bolt F a single bolt, H, may be introduced through the rudder-post G and secured in the nut J in the pocket E. A pinion, K, gearing into the segment A and mounted on a shaft, L, turning in bearings M and M′ and operated and controlled by a windlass or steering-wheel, N, gears into the segment, so that the motion of the upper handles of the wheel is the same as the motion of a tiller would move if applied to the rudder-post.

The advantages of this invention are, that from its construction I am able at a low cost to make a steering mechanism that is readily applicable and adjustable to any sizes of rudder-posts within a considerable range of sizes, and securely and properly fixed thereto by persons of moderate mechanical skill, and when in use I avoid the embarrassment and liability to accident incident to steering-gears in which the motion is reversed.

What I claim as my invention is—

1. The beveled-wheel segment, provided with slotted apertures and combined with a strap-bolt and nuts for fastening the same, as set forth.

2. The beveled segment having a central bolt-hole and nut-pocket adapted to be held to a rudder-post by a central bolt and nut, as set forth.

DAVID SCATTERGOOD.

Witnesses:
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