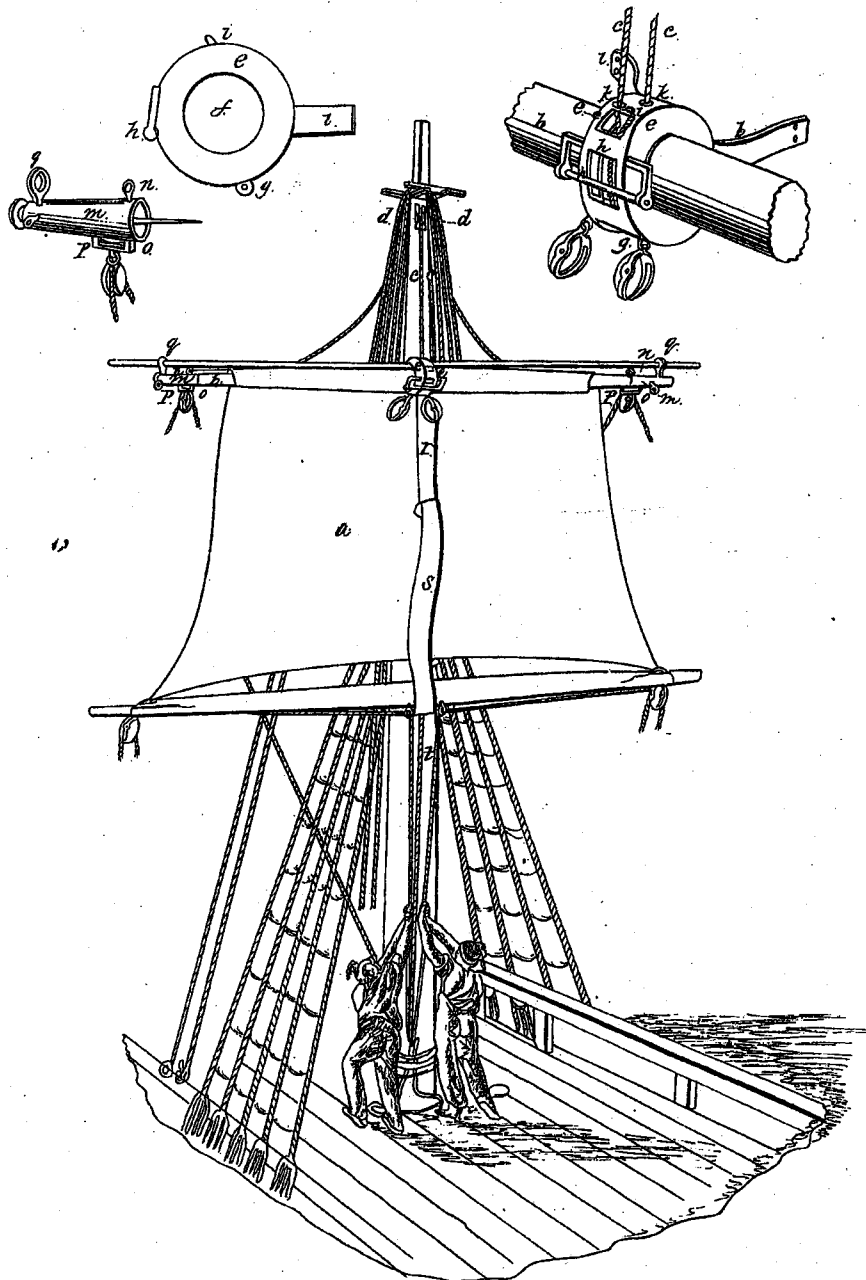


*J. Wade,
Sails & Rigging.*

Patented Dec. 6, 1836.



UNITED STATES PATENT OFFICE.

JOHN WADE, OF BOSTON, MASSACHUSETTS.

METHOD OF MAKING AND FURLING IN SAILS FOR SHIPS, &c.

Specification of Letters Patent No. 101, dated December 6, 1836.

To all whom it may concern:

Be it known that I, JOHN WADE, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Method of Making and Taking in Sail by Means of a Revolving Yard on which the Sail is Wound Instead of Reefing, which is described as follows, reference being had to the annexed drawings of the same, making

part of this specification.

The nature of my invention consists in winding the sail *a*, on the yard *b*, instead of reefing as in the old mode by causing the yard to have a revolving motion by means of two or more turns of the halyards *c*, *c*, around the center of the yard forming a parbuckle—the halyards passing through two shives *d*, *d*, and coming down in the ordinary way, and attached to the rail. The yard is kept to the mast, and moves up and down against the same by means of an iron parrel in which the yard revolves, this parrel consists of two circular metallic plates *e*, *e*, having a round aperture *f*, in each to admit the yard to pass loosely through, connected together by cross pieces, one of which *g*, forms eye-bolts for the quarter blocks, another *h*, forms a roller for the center cloth hereafter described,—a third *i* forms an eye-bolt to which are fastened the heels of the studding sail booms, and two apertures *k*, *k*, for the topsail halyards, and a fourth forms a semicircular metallic parrel *l*, embracing the mast.

On each end of the yard there is a loose metallic box, *M*, into which is fastened three eyebolts *n*, *o*, *p*, for the lefts, the brace blocks, the studding sail halyard block also for the top gallant studding sail boom—

iron *y*, this box is attached to the end of the yard by an iron bolt with a broad head inserted in the end, in which box the yard with the bolt revolves, the sail in the center is left open at *v*, as far as the close reef to avoid obstruction from the parrel in winding the sail, which open space is covered by an apron or center cloth *S*, one end being attached to the said, and the other end passed over the roller *h*, and drawn taut by a line *t*, rove through a thimble attached to the foot of the sail.

One man with this apparatus will be enabled to roll up in one minute three top sails of a ship without leaving the deck by simply letting go the top-sail halyards; the yard in descending revolving, and winding the sail upon it, one side of the halyards remaining fast. In making sail the halyards are to be simply hauled which causing the yard to revolve in a contrary direction turns off the sail again. By the use of this apparatus all reef gear is dispensed with.

The invention claimed, and desired to be secured by Letters Patent consists—

In the before described method of making, and taking in sail without the necessity of reefing, by carrying the yard to revolve by means of the loose parrel, and halyards combined with the boxes at the ends of the yards, the opening, and apron in the center of the sail, also the peculiar construction of the parrel, and boxes at the ends of the yards, as herein set forth.

JOHN WADE.

Witnesses:

WM. P. ELLIOT,
WM. BISHOP.