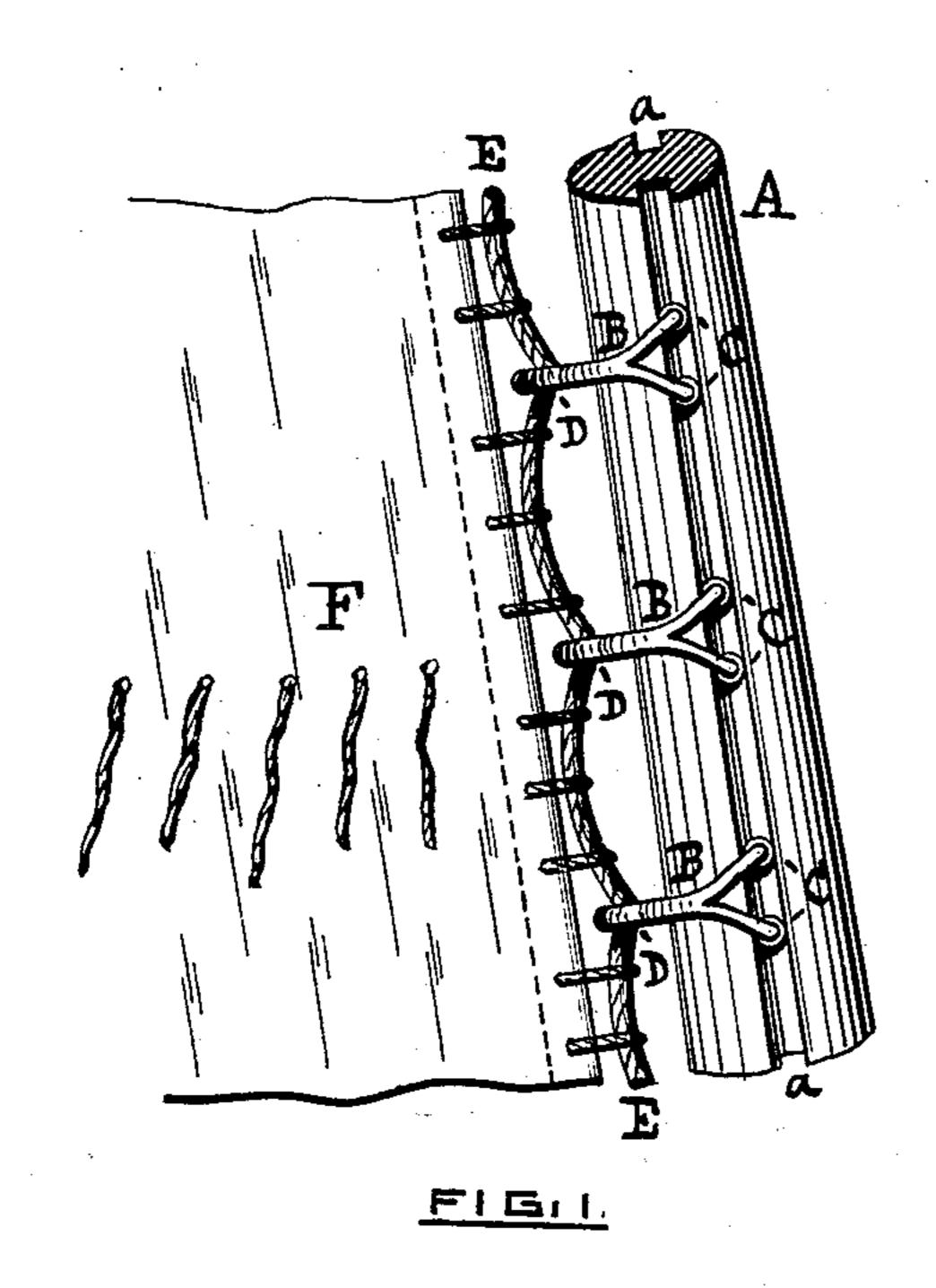
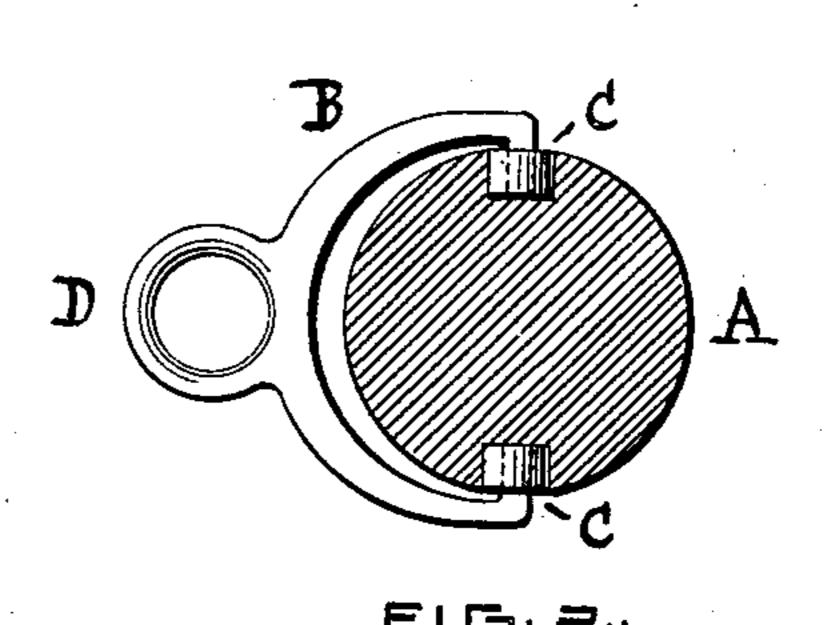
(No Model.)

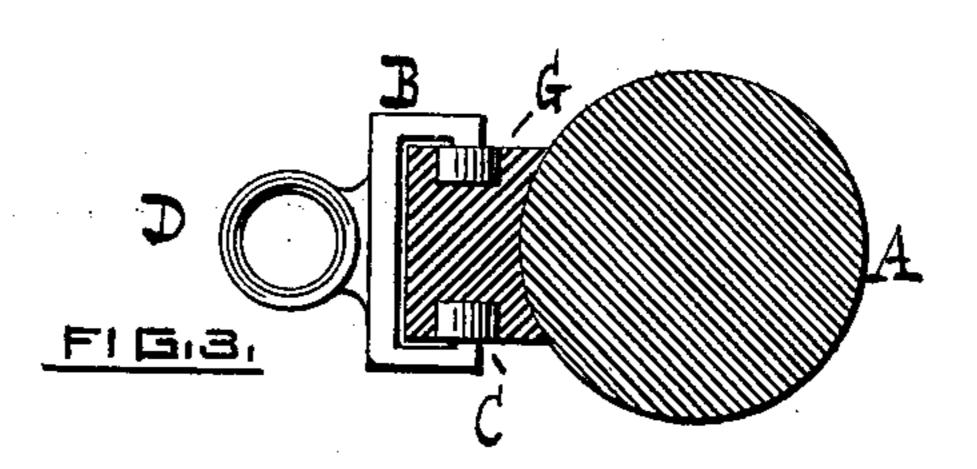
T. HAGGERTY. SAIL HANK.

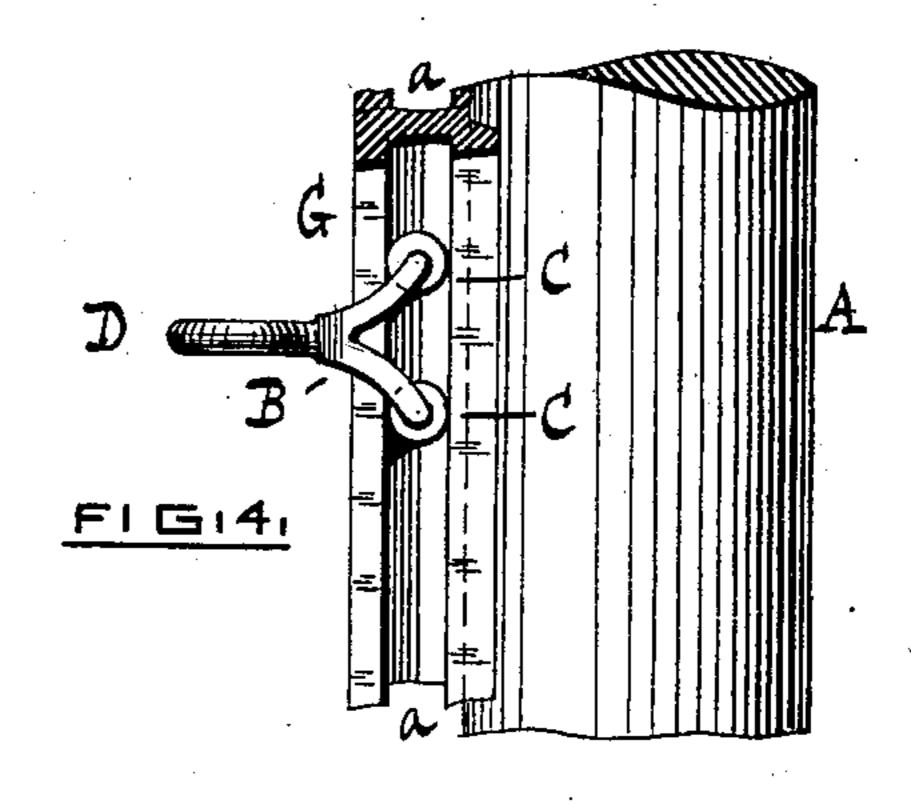
No. 253,528.

Patented Feb. 14, 1882.









Suferin L. Jamie
Nelson & Church

INVENTOR

Timothy Haggerty by his attorney; Perce & Efallett

United States Patent Office.

TIMOTHY HAGGERTY, OF FALL RIVER, MASSACHUSETTS.

SAIL-HANK.

SPECIFICATION forming part of Letters Patent No. 253,528, dated February 14, 1882.

Application filed December 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY HAGGERTY, of Fall River, in the county of Bristol, in the State of Massachusetts, have invented a new and useful Improvement in Apparatus for Raising and Lowering Sails; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a side elevation of my invention. Fig. 2 shows the mast in transverse section with my improved sliding clutch in position. Figs. 3 and 4 show the application of my sliding clutch to a cleat or guide extending lengthing wise the after part of the mast.

My invention is designed as a substitute for mast-hoops, by which usually the sail is held to the mast; and it consists of a clutch sliding by means of friction-rolls within vertical ways on the two opposite sides of the mast, and having a ring to hold the bolt-rope of the luff of

the sail.

In the drawings, A represents the mast, grooved longitudinally upon two opposite sides to form the ways a a. A clutch, B, made preferably of galvanized iron, having a bifurcation at each end, is mounted upon four friction-rollers, C, two on each side, which fit within their respective ways a a, and is thus capable of easy motion along said ways. A ring or eye, D, is fashioned upon the clutch B, through which the bolt-rope E of the sail F is reeved.

In Figs. 3 and 4 I show a modified form of applying my invention, consisting of making the ways or grooves in a separate cleat or strip of wood or metal, G, to be attached by bolts or screws to the after part of the mast, instead of cutting the grooves in the mast itself.

In the use of the mast-hoops, for which my invention is a substitute, the strain of the sail 40 in hoisting, falling, or jibing brings the hoops to a position diagonally around the mast, causing the hoops to bind upon the mast on their forward side. To reduce this friction, which greatly interferes with the easy and proper 45 manipulation and management of the sail, it has been common to keep the mast well greased, to facilitate the sliding of the hoops upon it; but this remedy is not completely effectual, and the hoops will catch and bind more or less, 50 occasioning increased labor, and in sudden flaws of wind considerable danger, because it may prevent the rapid lowering of the sail when necessary for safety. By using my contrivance it is unnecessary to grease the mast, 55 and the clutches, traveling on their frictionrollers in direct vertical ways, fall instantly and let the sail come down on a run.

I am aware of the Letters Patent of the United States granted to J. Gondie, No. 60 235,868, and dated December 28, 1880, and do not claim any of the devices therein specified;

but

I claim as a novel and useful invention, and desire to secure by Letters Patent—

The improved sail-hank herein described, consisting of a clutch, B, having a ring, D, to confine the bolt-rope E of a sail, and formed with a bifurcation on each side, whereon are mounted friction-rollers C C C C to run in the 70 external vertical ways, a a, upon the opposite sides of a mast, substantially as specified.

TIMOTHY HAGGERTY.

Witnesses:

GEORGE E. BAMFORD, BENJAMIN D. BRIGGS.