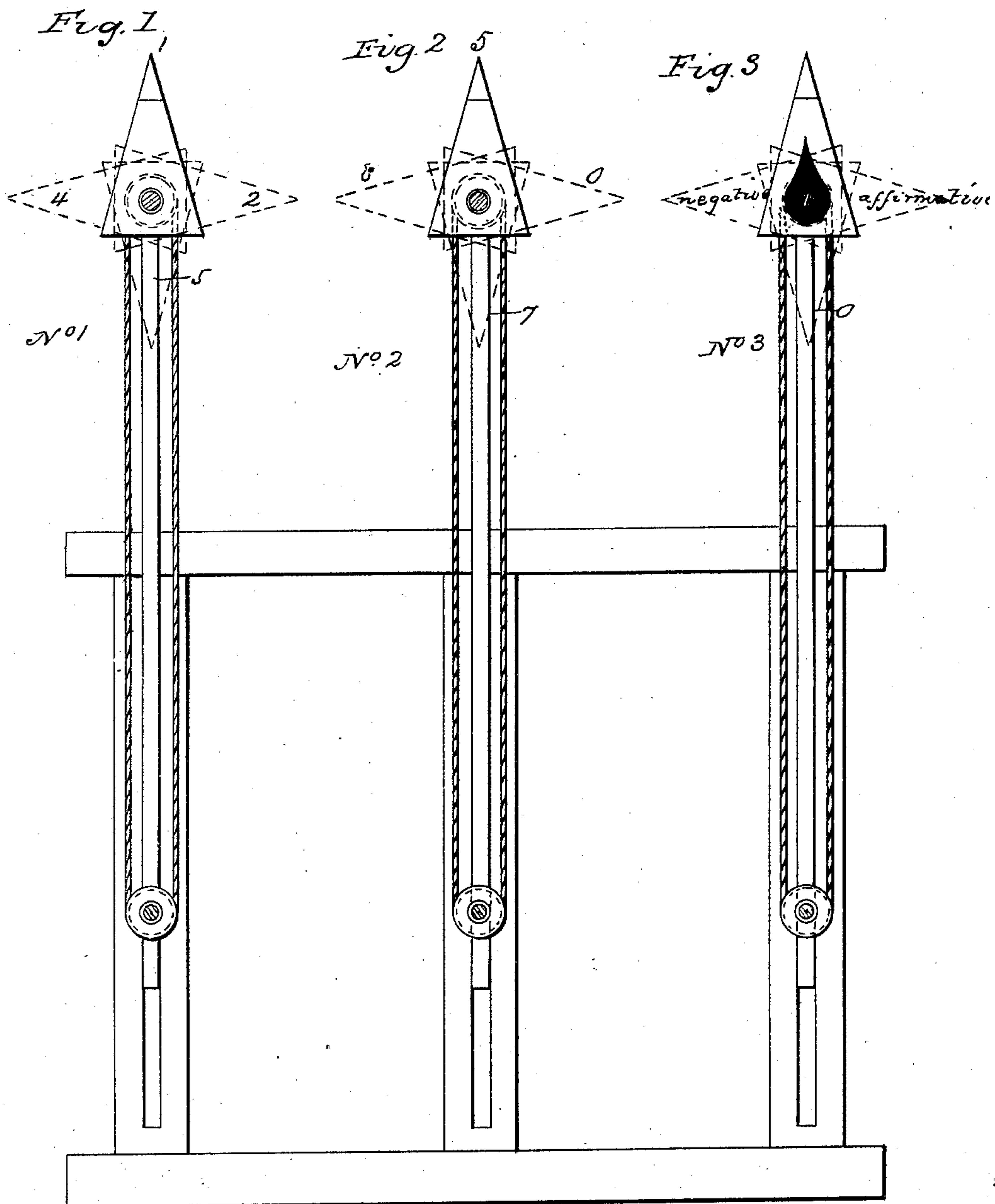


W. BOYD.  
Marine Signal.

No. 20,402.

Patented June 1, 1858.



# UNITED STATES PATENT OFFICE.

WILLIAM BOYD, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVED MECHANISM FOR OPERATING SEMAPHORIC SIGNALS.

Specification forming part of Letters Patent No. **20,402**, dated June 1, 1858.

*To all whom it may concern:*

Be it known that I, WILLIAM BOYD, of the city of Washington, District of Columbia, have invented a new and Improved Day Marine Telegraph, to be called the "Lavallette Telegraph," and which is designed for communicating between vessels at sea and between vessels and forts or light-houses and other stations on the coast, by means of which orders can be issued, information asked, wants made known, and all the phrases now in use for marine purposes communicated with much greater facility and in much less time than by any means heretofore employed, thereby dispensing with the use of preparatory signal-flags and the delay and trouble of hoisting them, as well as the tedious and slow process of bending numerous flags on halyards and the uncertainty of understanding the communication under the most favorable circumstances.

The nature of my invention consists in the combination and arrangements of parts for actuating three conical flags stretched on frames, their colors respectively being red, white, and blue. Each can be moved irrespective of the others by means of a pulley and cord or their equivalents, and each moves on its axle independent of the action or movement of the other two flags. By means of a sliding pole working in grooves of a frame the flags can be hoisted and lowered at pleasure.

To enable mariners and others to use my said invention, I do hereby declare that the following is a full, clear, and exact descrip-

tion of the operation of the same, reference being had to the annexed drawing, making a part of this specification.

The mode of operating my said signal-flags Nos. 1, 2, and 3, as telegraph signs for numerals, letters, words, or sentences, is as follows: One revolution of the flags (Nos. 1, 2, and 3) indicates ten arithmetical figures, as well as the affirmative and the negative, so as to adapt them to Mariet's or any of the signal codes now in use. Flag No. 1, color blue, its apex pointing upward, indicates figure 1; to the right, 2; downward, 3; to the left, 4. Flag No. 2, color red, apex pointing upward, figure 5; to the right, 6; downward, 7; to the left, 8. Flag No. 3, white, apex pointing upward, figure 9; downward, 0; to the right, affirmative; to the left, negative.

The manner of operating the said signals may be varied to suit any understanding previously made, so that the communication or interchange may be private.

I do not claim, broadly, signaling by revolving signs or flags whose positions represent certain figures, letters, or numbers, but

I do claim—

The particular mechanism described and shown for operating such signs or flags when combined and arranged substantially as set forth.

WILLIAM BOYD.

Witnesses:

A. F. MOULDEN,  
WM. SMALLWOOD.