

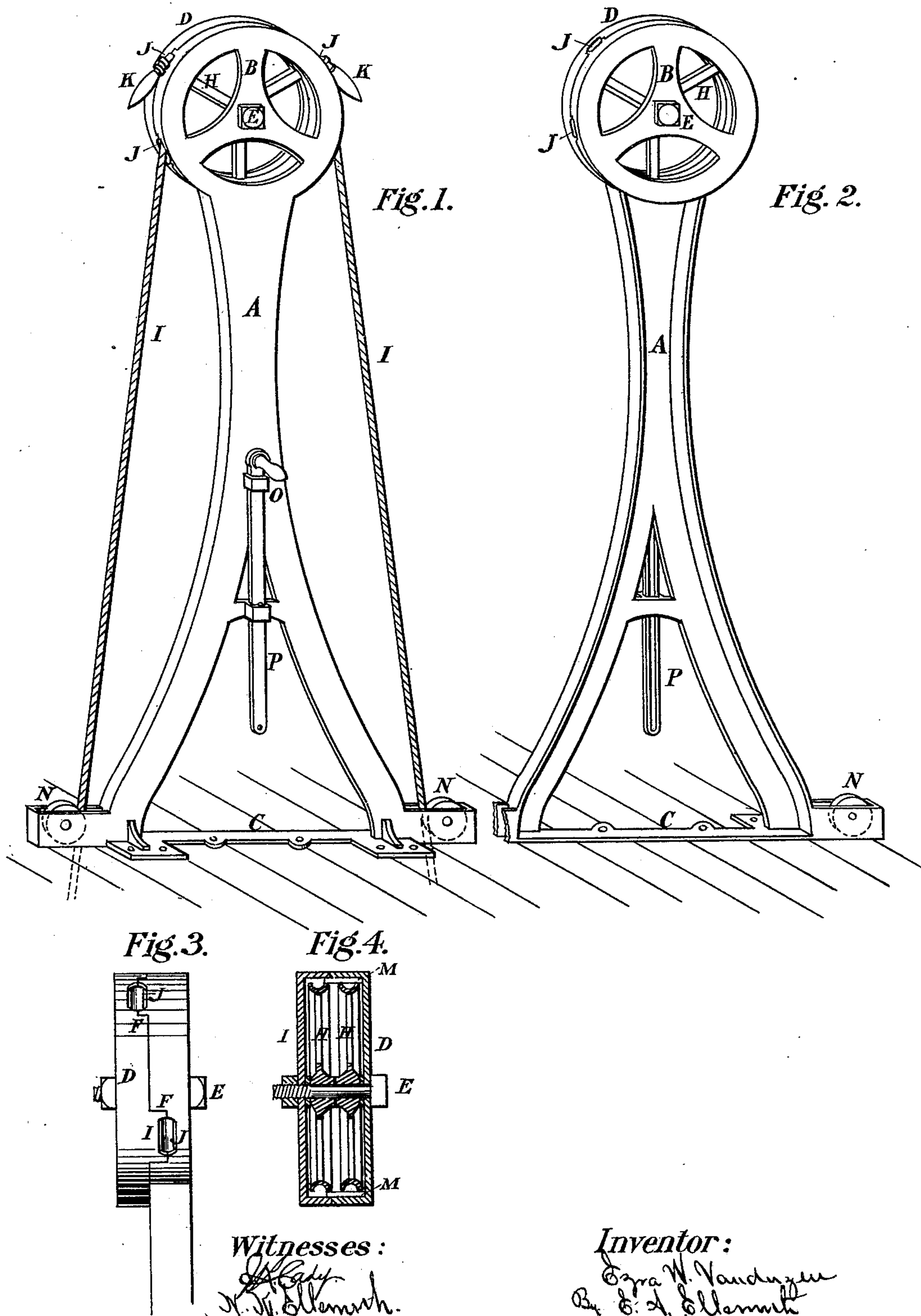
(No Model.)

E. W. VANDUZEN.

Line Stand for Steamboat Bells.

No. 229,570.

Patented July 6, 1880.



UNITED STATES PATENT OFFICE.

EZRA W. VANDUZEN, OF NEWPORT, KENTUCKY.

LINE-STAND FOR STEAMBOAT-BELLS.

SPECIFICATION forming part of Letters Patent No. 229,570, dated July 6, 1880.

Application filed April 19, 1880. (No model.)

To all whom it may concern:

Be it known that I, EZRA W. VANDUZEN, a citizen of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have invented a new and useful Line - Stand for Steamboat - Bells, (Case G;) and I do hereby declare the following to be a full, clear, concise, and exact description of the same, sufficient to enable others skilled in the art to which my invention appertains to make and use it, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front perspective view of the stand with the lines attached. Fig. 2 is a rear perspective view of the same. Fig. 3 is an edge view of the head of the stand, and Fig. 4 is a transverse section of the head.

Similar letters of reference in the several figures of the drawings indicate the same parts.

My invention relates to line-stands which are placed in the pilot-houses of steamboats, in front of the pilot-wheels, for the purpose of supporting and guiding the lines of certain bells which the pilot rings to signal the engineer of the boat. These stands carry four small sheaves, over two of which each bell-line passes down to the bell, and the ends of the two lines are provided with handles, which the pilot grasps to pull the lines and ring the bells. The double set of sheaves deflects the course of the lines, thereby increasing the friction and causing the lines to run unnecessarily hard.

The object of my invention is to improve the construction of these stands, whereby the lines can be more easily and readily manipulated; and to this end it consists, first, in providing the stand with two large grooved pulleys mounted upon the same pivot, and each supporting and guiding a line upon one side of the head, by which means the lines are caused to run easily and freely without the possibility of binding, and respond readily to a very slight pull upon the handles.

It also consists in the peculiar construction of the stand, as I will presently describe.

In the accompanying drawings, A represents the main portion of the stand, composed of cast-iron, in the form of a shell with a circular head, B, and a bifurcated body, forming braces

or supports, which are bolted to the deck or floor of the pilot-house to hold the stand upright in front of the pilot-wheel. These braces or legs are cast with feet and a cross connecting-flange, C, through which the fastening-bolts are inserted. The head is recessed in the back, and a circular recessed back piece, D, of corresponding size and shape, is bolted to it by a single central bolt, E, and the edges of the head and back piece are formed with lips F, and with recesses to receive the lips, for the purpose of preventing the back piece from turning on the bolt and head.

H H are large grooved pulleys mounted upon the central bolt within the head, and I I are the bell-lines, passing through the head and over the pulleys. The lines cross beside each other in the head, extending through the slots J J in the edge thereof, and are provided with handles K K, which bear upon the head around slots and prevent the lines from falling out. The lines are so arranged that the starboard line enters the lower slot on the right-hand side of the head, thence passes over one pulley, and out through the upper slot in the left-hand side of the head, where it receives its handle, and the larboard line enters the lower slot of the head on the left-hand side, and thence passes over the other pulley, and out through the upper slot in the right-hand side of the head, where it receives its handle. The edges of the slots are rounded off and made as smooth as possible to avoid abrading the lines, and the latter are prevented from running off the pulleys by transverse ribs M, cast on the inner circumference of the back piece, D, as shown in Fig. 4. The bell-lines pass downward from the head on each side in contact with grooved wooden pulleys N, journaled in the feet of the stand, and thence pass to the bells in the usual manner.

In operating the lines the pilot stands upon either side of the pilot-wheel and pulls either the handles or the lines below the head—that is to say, if standing at the right of the wheel, for example, he pulls the handle of the larboard line to ring the port bell and grasps the starboard line below the head to ring the starboard bell, the operation being reversed if he stands upon the left of the pilot-wheel. The grooved wooden pulleys or rollers are em-

ployed to guide the lines and prevent them from chafing when pulled from below the head, the lines being guided above the operator's hand by the slots in the head of the stand.

- 5 P is the slide for the alarm-bell, working within two guide-loops, O O, on the front of the stand. Instead of attaching these loops to the stand by rivets or bolts, as commonly done, I cast them in one piece with the stand, thereby reducing the cost of manufacture and making the loops more rigid and secure.

By constructing the stand as above described it is greatly simplified and cheapened, and the pulleys are much more sensitive in the operation of the lines than the old arrangement of four small pulleys.

Having thus described my invention, what I claim is—

1. The cast-metal line-stand A for steam-boat-bells, having two large grooved pulleys, H H, mounted upon a single bolt in the head, and two sets of slots, K K, in the edge of the head, for the passage of the bell-lines, extending over the pulleys, substantially as described, for the purpose specified.

2. The head of the line-stand, cast with a series of transverse ribs, M, arranged at suitable distances around its interior walls, sub-

stantially as described, for the purpose specified.

3. The bell-line stand consisting of the body, the front part of the head, legs, feet, base-flange C, and guide-loops O O, all cast in one piece, substantially as described, for the purpose specified.

4. The head of the bell-line stand, composed of two circular recessed parts, B D, bolted together by a single bolt, E, and joined at their eyes by the lips F and recesses, substantially as described, for the purpose specified.

5. The combination of the grooved wooden rollers N in the feet of the stand and the slots J J in the head of the stand with the two bell-ropes, for the purpose of guiding the latter above and below the hand of the operator when grasping the ropes at the side of the stand below the head, substantially as described.

In testimony of which invention I have hereto set my hand this 1st day of April, A. D. 1880.

EZRA W. VANDUZEN.

Witnesses:

E. A. ELLSWORTH,
N. K. ELLSWORTH.