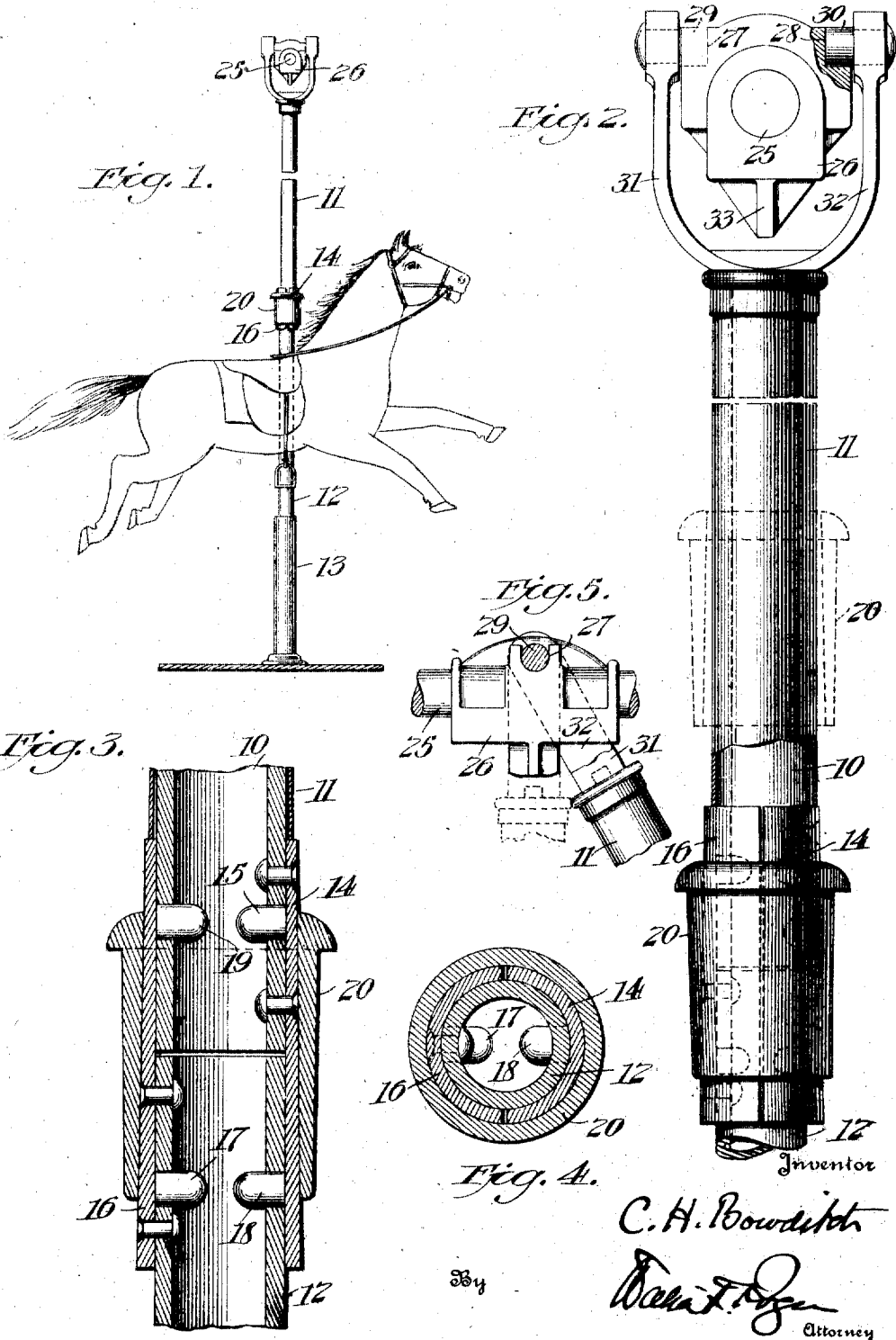


C. H. BOWDITCH.
 PORTABLE HORSE HANGER AND COUPLING FOR CAROUSELS.
 APPLICATION FILED MAR. 31, 1916.

1,230,103.

Patented June 19, 1917.



UNITED STATES PATENT OFFICE.

CHARLES H. BOWDITCH, OF ERDENHEIM, PENNSYLVANIA, ASSIGNOR TO HENRY B. AUCHY, OF ERDENHEIM, PENNSYLVANIA.

PORTABLE HORSE-HANGER AND COUPLING FOR CAROUSELS.

1,230,103.

Specification of Letters Patent.

Patented June 19, 1917.

Application filed March 31, 1916. Serial No. 87,949.

To all whom it may concern:

Be it known that I, CHARLES H. BOWDITCH, a citizen of the United States, residing at Erdenheim, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Portable Horse-Hangers and Couplings for Carousels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to carousels. Its object is to provide a portable horse-hanger and coupler for carousels. To this end it comprises the combination of parts recited in the appended claims.

In the drawings:

Figure 1 is a side elevation showing a jumping horse in place;

Fig. 2 is a partial side elevation partly broken away and with dotted lines to indicate the relation of the parts;

Fig. 3 is a partial central, longitudinal section;

Fig. 4 is a cross-section through Fig. 3.

Fig. 5 is a detail in side elevation of the hanger, shaft, etc.

In the drawings 10 represents an upper section of a hanger-rod with a customary outer casing 11. 12 represents the lower section of a hanger-rod playing in the hollow base portion 13. The upper section 10 of the hanger-rod carries a semi-circular sleeve 14 riveted to the upper section and having also a round faced pin 15 passing through a perforation in the section of the hanger-rod. 16 is a corresponding semi-circular sleeve riveted to the lower section of the post and having also a pin 17 passing through a corresponding perforation. The semi-circular sleeve 14 bears a pin 18 which projects into a perforation in the lower section of the hanger-rod, while the semi-circular sleeve 16 bears a pin 19 which projects into a perforation of the lower end of the upper section of the hanger-rod. The semi-circular sections are beveled so that the outer surface is inclined from outwardly, that is, thicker at the bottom than at the top, when the two semi-circular sections are fitted on the two sections of the hanger-rod to bind them together. 20 is a coupling sleeve with its interior surface inclined inwardly so that

it is larger at the bottom than at the top, and, is thus reversely inclined with reference to the surface of the semi-circular sleeves when applied.

In assembling the parts the upper hanger-rod section with its attached semi-circular sleeve is brought over to the lower section, the pin 15 of the depending semi-circular section entering the corresponding perforation in the lower section of the hanger-rod, while the pin 18 of the semi-circular sleeve 16 takes into the corresponding perforation in the section 14. That is to say, when the parts of the two hanger-rod sections are brought together, the free ends of the semi-circular sleeves spring into place when the pins reach the corresponding perforations in the hanger-rod, the semi-circular sleeves surrounding the junction of the hanger-rod sections. Then the coupler sleeve 20 which has been held above, as shown in the dotted lines in Fig. 2, is hammered down upon the inclined surface of the binding sleeves until the whole is securely fastened together, and, yet, readily taken apart by knocking up on the flange of the coupling sleeve and springing out the depending sleeve 14 and the upwardly extending sleeve 16 so that the sections may be separated.

I have provided also a device which enables me to readily assemble the parts and especially to readily apply the hanger-rod to the crank shaft. 25 represents a crank shaft. The crank shaft turns in a bearing 26 which is recessed at 27 and 28 to receive projecting pins 29, 30 secured to opposite arms 31, 32, of a fork at the top of the hanger-rod. The bearing casting has a downwardly projecting web 33 which reaches nearly to the base of the fork of the hanger-rod to prevent the hanger-rod from rising when in place. It will be readily understood that the hanger-rod may be brought up on one side at an angle and the pins 29, 30, dropped into place in the recesses 27, 28, and that the hanger-rod then may be swung into a vertical position, the fork just clearing the projecting web 33.

I claim:

1. In a carousel or other structure, the combination with sections of a hanger-rod, of a section of a yielding sleeve carried by each section of the hanger-rod and projecting from the end thereof, and a coupling

sleeve adapted to be driven over the sleeves when they are brought together.

2. In a carousel or other structure, the combination of opposing sections of a hanger-rod, sectional yielding sleeves attached to each section of the hanger-rod and projecting beyond the end of the corresponding section and serving to substantially inclose the sections when brought together, and a coupling sleeve adapted to be driven down upon the inclosing sections.

3. In a carousel, the combination with sections of a hanger-rod, of sectional yielding sleeves attached to each section of the hanger-rod, each sleeve having a free end projecting beyond its section of the hanger-rod, perforations in the sections of the hanger-rods, pins on the sleeve section to engage the perforations, and a coupling sleeve adapted to be driven down upon the several sections.

4. In a carousel or other structure, the combination of sections of a hanger-rod, a sectional yielding sleeve projecting from each section of the hanger-rod to inclose the hanger-rod and provide an inclined outer surface, of a coupling sleeve having an op-

positely inclined interior adapted to be driven down upon the sectional sleeves.

5. In a carousel or similar structure, a hanger-rod comprising two sections, the lower section having a semi-circular yielding sleeve secured at its top and projecting above the hanger-rod section, the upper section having a semi-circular sleeve secured at its bottom projecting below the semi-circular sleeves, being adapted to inclose the ends of the sections, and a freely movable coupling sleeve adapted to be driven down upon the semi-circular sections to bind the parts together.

6. In a carousel or other structure, the combination with a crank-shaft and a hanger-rod depending below the crank-shaft, of a bearing for the crank-shaft and the supports of the hanger-rod having a downwardly projecting web to form a stop against the upward movement of the hanger-rod.

In testimony whereof I have hereunto signed my name.

CHARLES H. BOWDITCH.