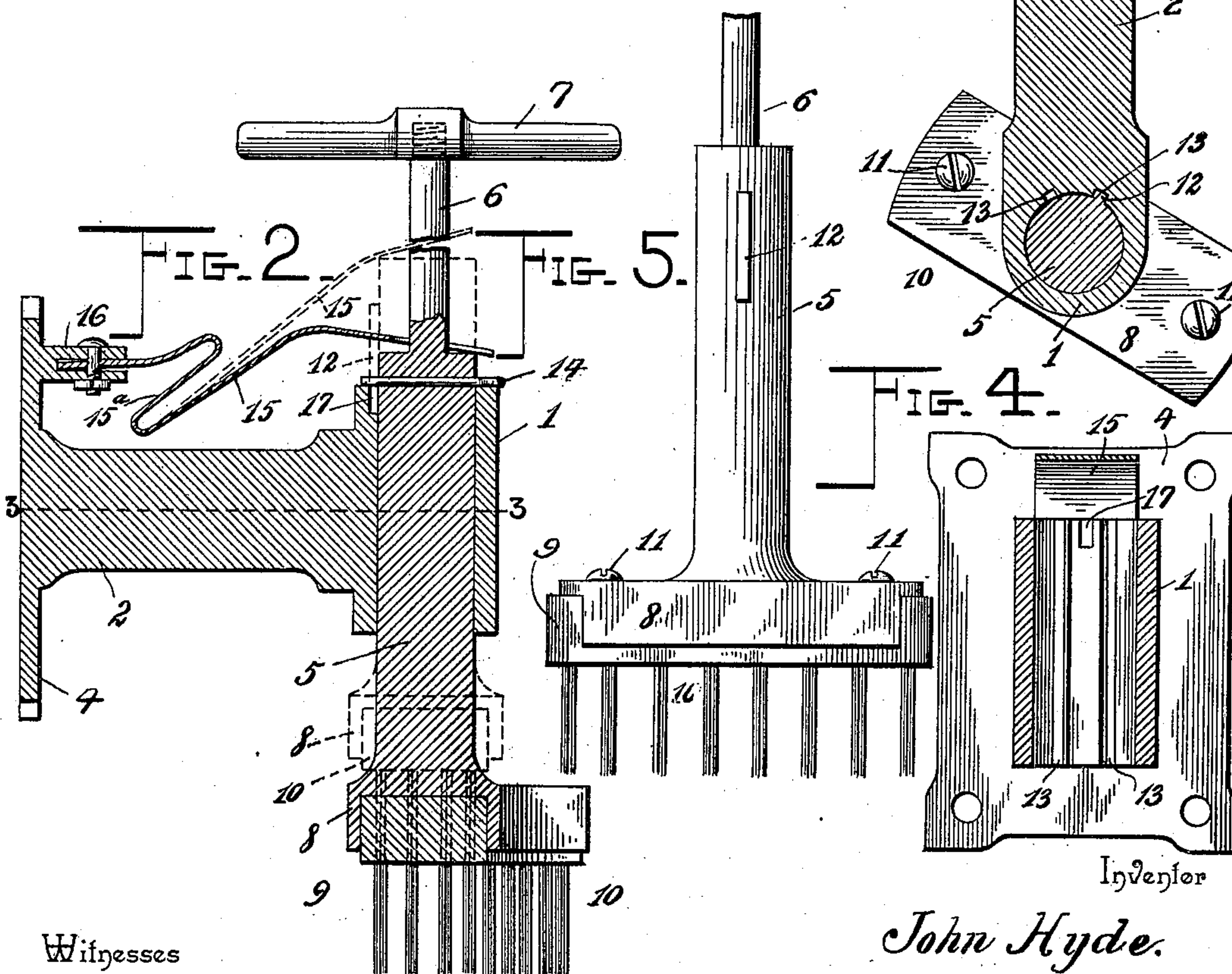
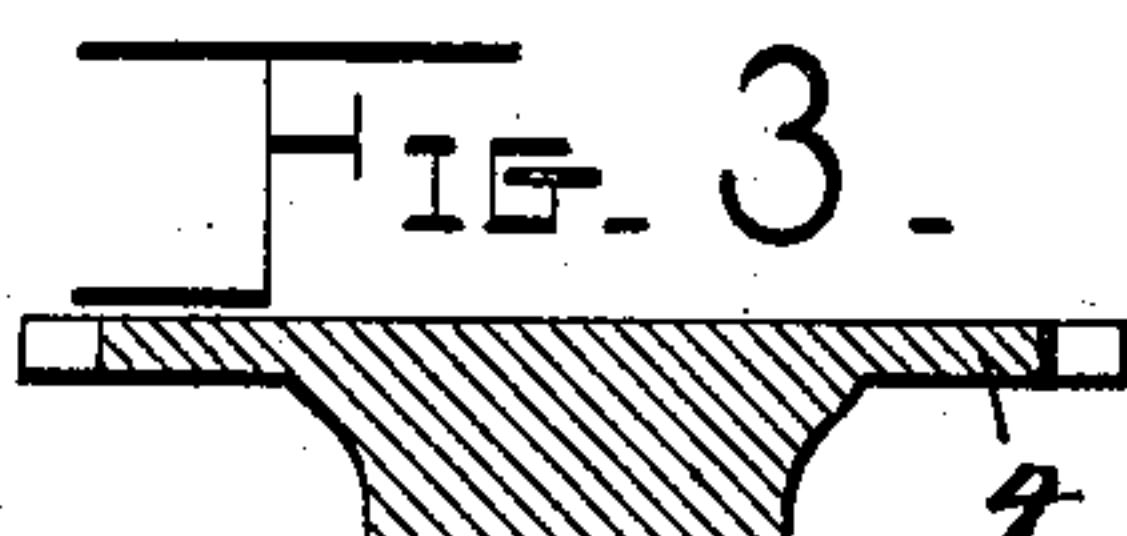
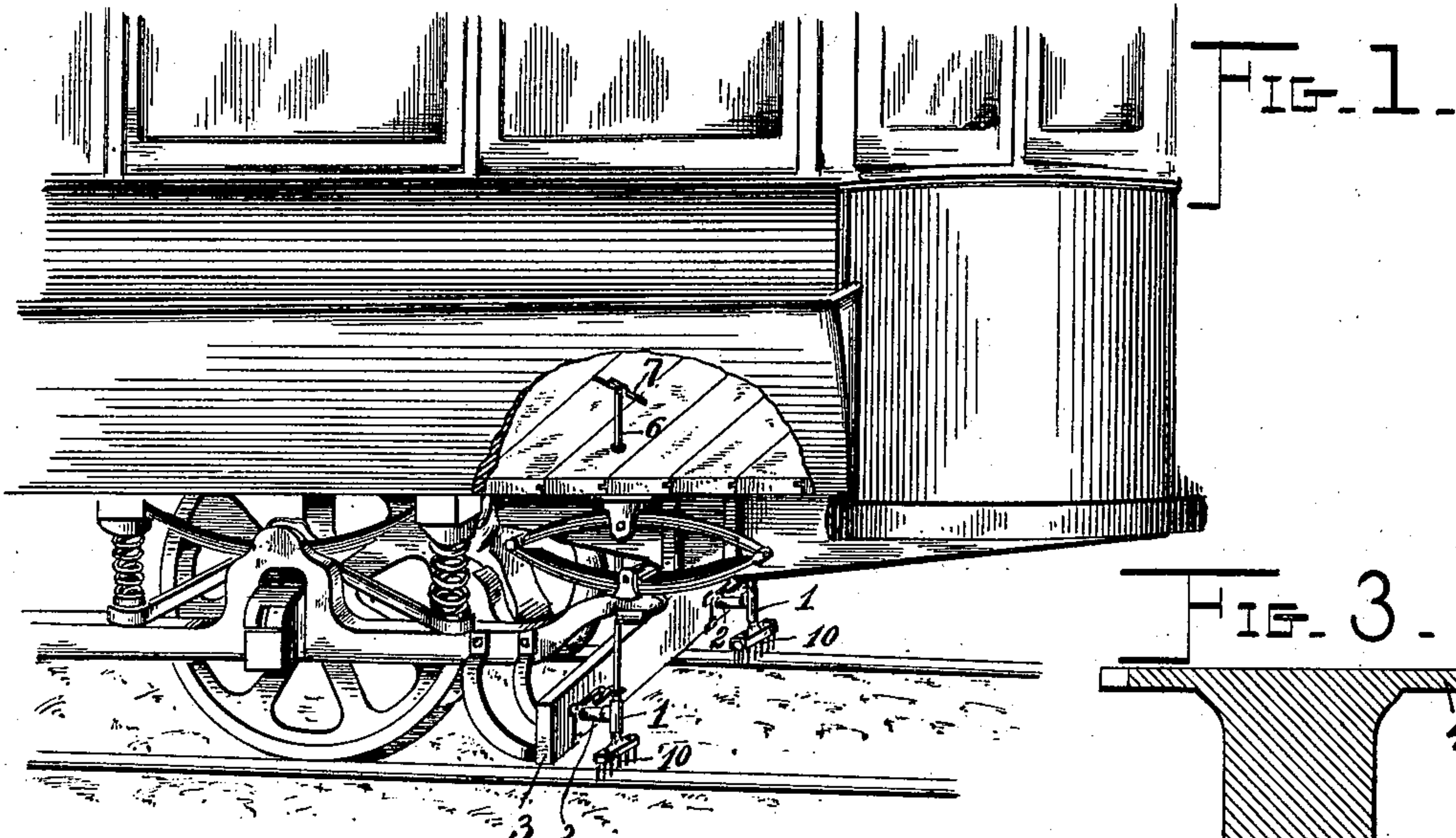


(No Model.)

J. HYDE.
TRACK CLEANER.

No. 602,081.

Patented Apr. 12, 1898.



Inventor

John Hyde.

Witnesses

John F. Seufferheld
[Signature]

By his Attorneys,

Cash & Co.

UNITED STATES PATENT OFFICE.

JOHN HYDE, OF TRENTON, NEW JERSEY.

TRACK-CLEANER.

SPECIFICATION forming part of Letters Patent No. 602,081, dated April 12, 1898.

Application filed July 20, 1897. Serial No. 645,245. (No model.)

To all whom it may concern:

Be it known that I, JOHN HYDE, a citizen of the United States, residing at Trenton, in the county of Mercer and State of New Jersey, have invented a new and useful Track-Cleaner, of which the following is a specification.

My invention relates to track-cleaners particularly adapted for street or tram cars; and the object in view is to provide a simple and efficient construction and arrangement of parts, adapting the device to be applied with facility to the truck or other suitable part of a car of any ordinary construction; to provide a track-cleaner adapted to be arranged in an inclined position either inwardly or outwardly with relation to the tracks, to operate either at the front or at the back end of a car; to provide simple and improved means for securing the brush of the cleaner in either of its adjusted positions or in an inoperative position when not in use, and also to provide means whereby the brush may be adjusted with facility either from the interior of the car-body or exteriorly thereof.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a track-cleaning apparatus constructed in accordance with my invention applied in the operative position to a car-truck. Fig. 2 is a vertical central section of the same, showing in dotted lines the elevated or inoperative position of the brush. Fig. 3 is a detail horizontal section on the line 3 3 of Fig. 2 to show the means for securing the brush hub or slide in its adjusted positions. Fig. 4 is a detail sectional view of the brush-hub guide. Fig. 5 is a detail side view of the brush-hub.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the illustrated embodiment of my invention a tubular guide 1 is provided with a suitable bracket 2 to facilitate its attachment to a pilot 3 or other suitable part of the truck of a car, said bracket being shown as consisting of a stem attached to a securing-plate 4; but it is obvious that the construction of the

bracket may be varied to suit the particular part of the car to which it is desired to apply the cleaning device.

Mounted for rotary and axial adjustment in the guide is a brush hub or slide 5, preferably fitting in the bore of the guide and provided with a stem 6 and a terminal handle 7 of any suitable or preferred construction. The hub or slide terminates at its lower end in a brush-seat 8, in which is removably fitted and secured the back 9 of a wire or equivalent brush 10, the securing devices in the construction illustrated consisting of screws 11. The brush may be elongated diametrically to the desired extent and is adapted to be arranged in an inclined position with relation to the line of the track-rails in order to deflect sweepings either inwardly or outwardly, as may be preferred, and in order to secure the brush in either of its adjusted positions I have provided the hub or slide with a longitudinal feather or web 12, adapted to fit in either of a plurality of grooves or channels 13, formed in the inner surface of the wall of the guide.

The hub or slide is capable of axial movement through a distance equal to and preferably slightly greater than the length of the feather or web, whereby the hub or slide may be elevated to disengage the feather or web from one of the grooves or channels and turned through an arc sufficient to arrange the feather or web in alinement with another groove or channel. The downward movement of the hub or slide is limited by a stop-pin 14, which in the construction illustrated consists of a split key fitted in a transverse opening in the hub or slide contiguous to its upper end and adapted when the parts are in their operative positions to bear upon the upper end of the tubular guide. The handle is preferably fitted removably upon the upper extremity of the stem, and hence it is obvious that by removing the split key the hub or slide may be removed downwardly from the guide when desired.

The brush is yieldingly held in its depressed position or in operative relation with the track-rail by means of a plate-spring 15, which is shown attached at one end to a bifurcated ear 16, projecting from the securing-plate or from any other suitable portion of the bracket and bearing upon a shoulder on the hub or

slide—as, for instance, the upper end thereof. The spring is shown bifurcated to straddle the contiguous portion of the stem, and it is preferably provided at an intermediate point
5 with a zigzag or sinuous portion 15^a, formed by doubling an intermediate portion of the spring upon itself, to give greater resilience and allow sufficient vertical movement of the free end thereof. The spring maintains the
10 brush in its depressed position in contact with the track-rail and compensates for the rocking of the truck; but downward displacement of the hub or slide is prevented by the above-described stop-pin.

15 In order to provide for securing the brush in its elevated or inoperative position, (indicated in dotted lines in Fig. 2,) I provide the inner surface of the guide with a false or auxiliary groove or channel 17, adapted to receive the feather or web on the hub or slide,
20 but having a depth which is insufficient to allow the brush to descend to its normal position. Hence when the feather or web of the hub or slide is engaged with the false or auxiliary groove or channel in the guide its downward movement, under the depressing influence of the actuating-spring, is limited.

In practice it may be preferable to provide for adjusting the brush from a point within
30 the car-body, in which case the stem may be made of sufficient length to project upwardly through the floor of the car, as shown in Fig. 1; but it is obvious that when such an arrangement is undesirable the stem may be
35 terminated short of the floor of the car to provide for the adjustment of the brush exteriorly.

From the above description it will be seen that the device embodying my invention is
40 applicable to a car-truck or other portion of a car structure without modifying the arrangement of the parts of the car and is adapted to be adjusted in either of a plurality of positions to deflect sweepings either inwardly or outwardly with relation to the track,
45 and that the operation of the device is such as to adapt it to be used either at the front or the rear end of a car, according to the direction of movement thereof, whereby it is
50 suitable for use in connection with a car which is capable of advancing in either direction.

Various changes in the form, proportion, and the minor details of construction may be
55 resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

60 1. A track-cleaner having a guide, a brush hub or slide mounted for axial and rotary movement in the guide and yieldingly held in its depressed position, and an interlocking connection, consisting of axially-disposed
65 grooves or channels in one of said members, one of said grooves terminating short of the others at its lower end and a feather or web

on the other member to engage one of said grooves or channels, to maintain the hub or slide at the desired rotary adjustment while
70 permitting upward axial movement, substantially as specified.

2. A track-cleaner having a tubular guide, a spring-depressed brush hub or slide fitted for axial and rotary adjustment in the guide
75 and yieldingly held in its depressed position, said guide being provided with a plurality of grooves or channels, extending to the upper end of the guide, one of the grooves having its lower end above the plane of the others
80 and a feather or web carried by the hub or slide for engaging either of said grooves or channels, and adapted to be disengaged at the upper ends thereof, substantially as specified.
85

3. A track-cleaner having a tubular guide provided with a plurality of interior main grooves or channels, and a false or auxiliary groove or channel of less depth than the main
90 grooves or channels, and a brush hub or slide fitted for axial and rotary movement in the guide and yieldingly held in its depressed position, said hub or slide being provided with a radial feather or web to engage one of said grooves or channels, substantially as
95 specified.

4. A track-cleaner having a guide provided with a bracket adapted to be attached to a car-truck, a brush hub or slide fitted for axial and rotary adjustment in the guide, and fitted
100 with a stem and an operating-handle, a feather or web carried by the hub or slide to engage either of a plurality of grooves or channels in the wall of the guide, a stop-pin for limiting the depression of the hub or slide,
105 and an actuating plate-spring attached to the bracket and bearing upon a shoulder or offset portion of the hub or slide, to yieldingly hold the latter in its depressed or operative position, substantially as specified.
110

5. A track-cleaner having a tubular guide provided with a bracket for attachment to a car-truck, a brush hub or slide fitted for axial and rotary adjustment in the guide and terminating at its lower end in a brush-seat, a
115 feather or web carried by the hub or slide to engage either of a plurality of grooves or channels in the wall of the guide, a reduced stem extending axially from the hub or slide and terminating in a removable operating-handle, a removable stop-pin fitted transversely in the hub or slide to limit the downward movement thereof, and an actuating plate-spring attached to the bracket and bearing terminally upon the upper end of the hub
120 or slide, to hold the latter yieldingly in its depressed position, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN HYDE.

Witnesses:

GEORGE W. MACPHERSON,
MARGE T. SIMPSON.