

Sept. 25, 1923.

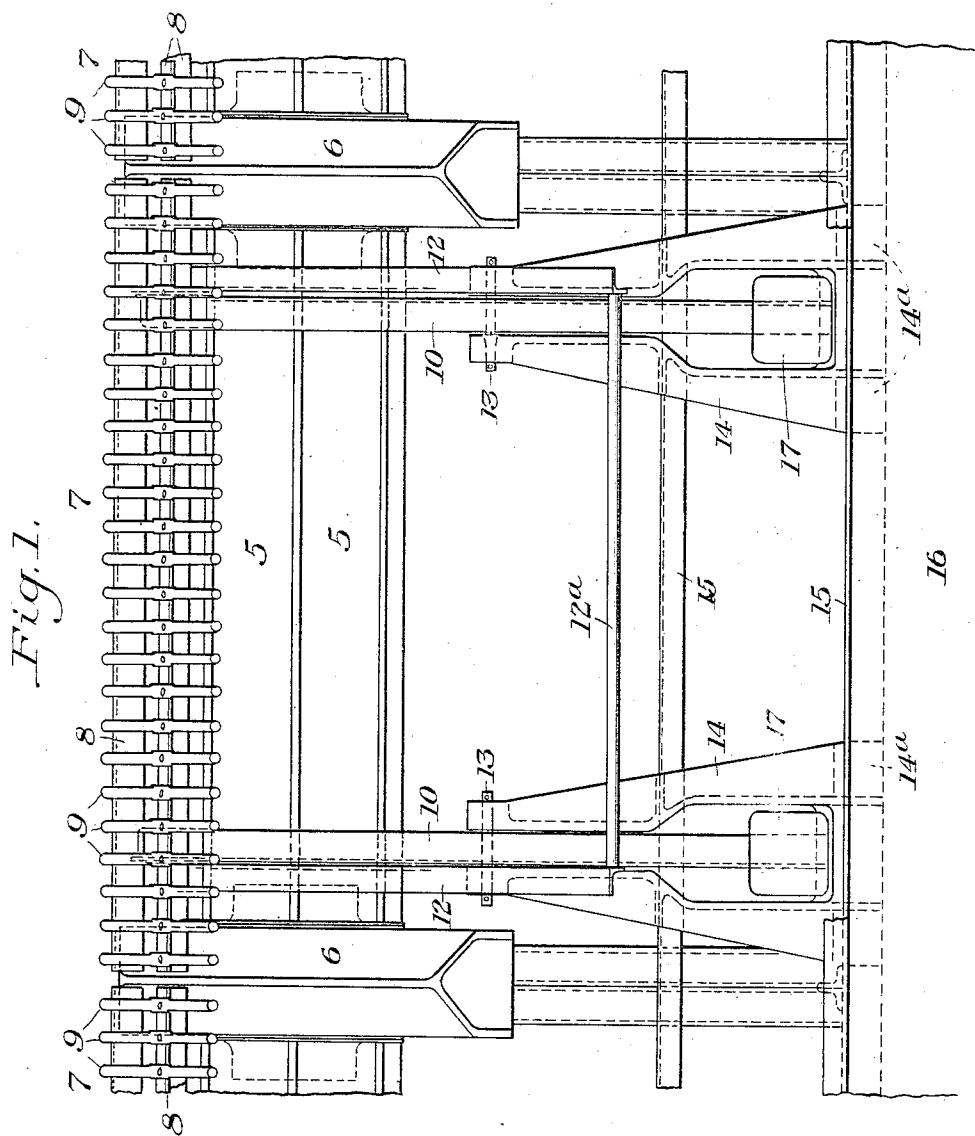
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E. J. MASON

COKE WHARF

Filed July 14, 1921

4 Sheets-Sheet 1



WITNESS

R. A. Balderson

INVENTOR

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Sept. 25, 1923.

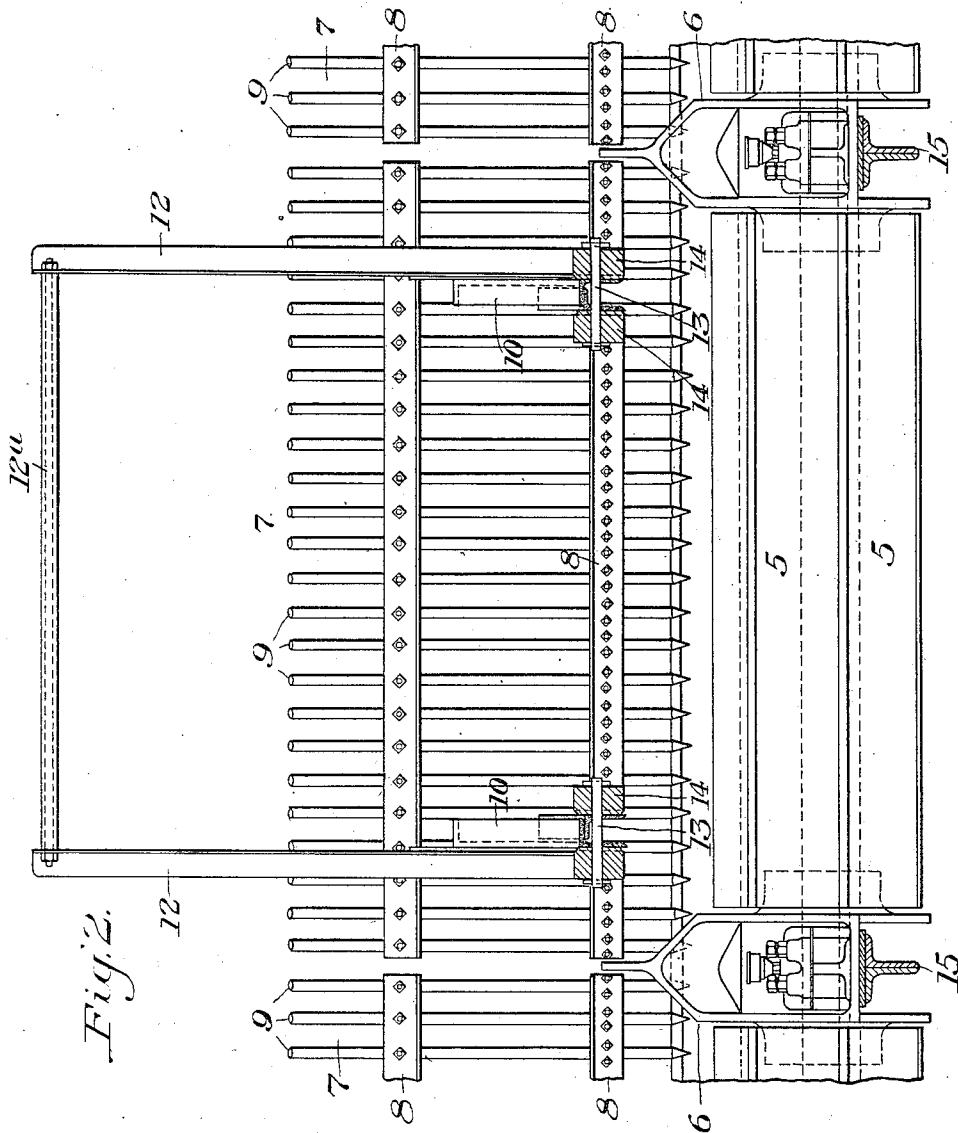
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4 Sheets-Sheet 2



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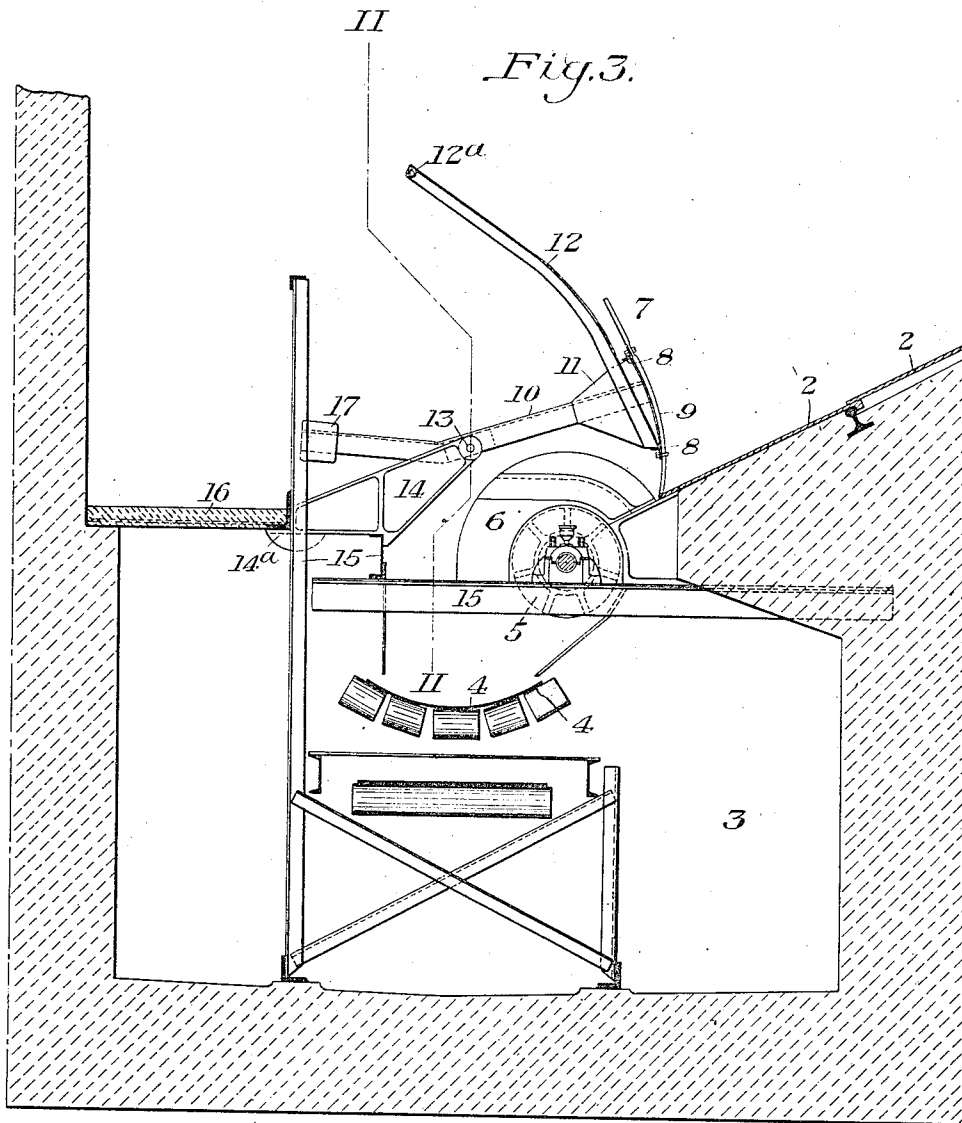
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4 Sheets-Sheet 3



WITNESS

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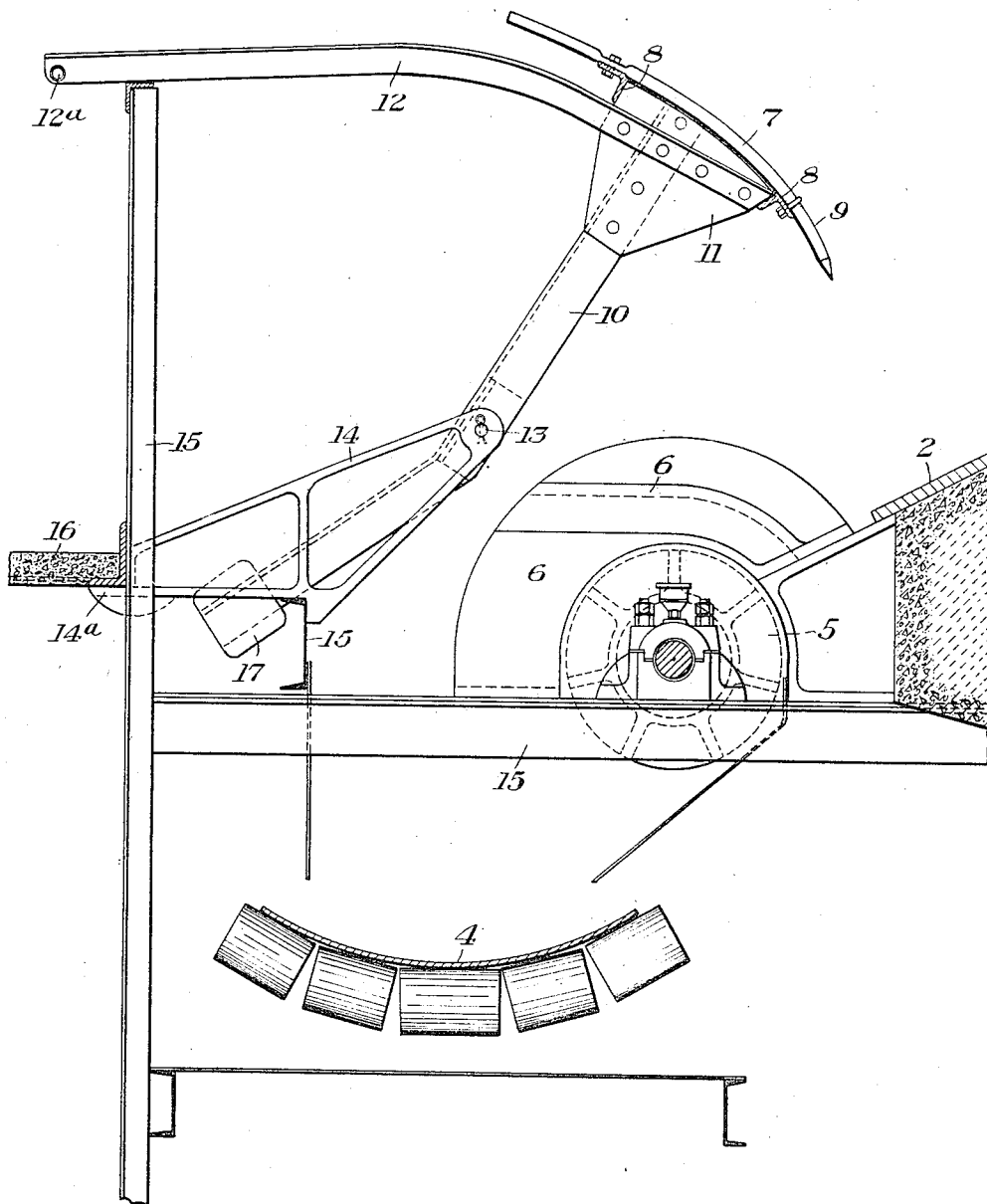
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4 Sheets-Sheet 4

Fig. 4.



WITNESS

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UNITED STATES PATENT OFFICE.

ELLIOTT J. MASON, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO HEYL & PATTERSON, INCORPORATED, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

COKE WHARF.

Application filed July 14, 1921. Serial No. 484,626.

To all whom it may concern:

Be it known that I, ELLIOTT J. MASON, a citizen of the United States, residing at Pittsburgh, Allegheny County, Pennsylvania, have invented a new and useful Improvement in Coke Wharves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a portion of a coke wharf embodying my invention.

Figure 2 is a sectional elevation of the same, the plane of the section being on the line II—II of Figure 3.

Figure 3 is a transverse vertical section of the wharf, and

Figure 4 is a sectional elevation showing parts of the wharf, and showing the gate in its open position.

My invention has relation to coke wharves, and more particularly to the gates which are used at the lower portions of the wharves for the purpose of controlling the discharge of coke therefrom. The invention is particularly designed to provide means of improved character for the pivotal support of the gates. This support is a matter of considerable importance by reason of the fact that the parts constituting the pivot must be so located as not to be subject to undue heat from the hot coke. It is also desirable to support the gates, or gate sections, in such a manner that access can be readily had to the rotary feeders and other adjacent parts without requiring the dismounting of any of the gate sections.

Referring to the accompanying drawings, the numeral 2 designates the lower discharge portion of an inclined coke wharf of the usual character, upon which coke is cooled. 3 designates the usual pit at the lower end of the wharf and in which is located a conveyor 4, or other vehicle, for carrying away the cooled coke. 5 designates a rotary feeder of any suitable character, formed in sections, the bearings therefor being provided with protecting guards 6. 7 designates the controlling gates or gate sections.

It will be understood that the wharf is of any desired length, and that a plurality of the rotary feeders and of the controlling gates or gate sections are arranged end to end according to the length of the wharf.

Each of the gate sections is shown as con-

sisting of the rail members 8 to which are secured pickets 9. Each section is carried by means of the two bars 10 connected to the rail members 8, one near each end thereof, through the medium of the gusset plates 11. The gate is provided with handle extensions 12 connected by a handle bar 12^a. The bars 10 are pivoted at 13 in brackets 14 which are secured to the frame 15 which supports the operator's platform 16, the heel ends of the brackets having an anchoring engagement with the platform, as shown at 14^a. These brackets are rigidly secured to this frame and project forwardly towards the rotary feeders. Each bracket is slotted or bifurcated in the manner best shown in Figure 1 to permit the counterweight 17 on the bars 10 to move therethrough.

It will be noted that the pivotal supports for the gate sections are located at points which are well away from the hot coke; while at the same time the construction is such that the movement of the gates adjacent to the wharf 2 will be very nearly in lines perpendicular to such surface, thereby avoiding undue drag or resistance on the coke in the opening and closing of the gates. The handle attachment for each gate, it will also be noted, extends back over the platform 16 in a position in which it may be readily reached by the operator. The supporting brackets for the gate sections are also arranged in such relation to the guards that they in no way interfere with the removal of the latter when it is necessary to obtain access to the feeder bearings.

I do not wish to limit myself to the exact construction or arrangement of the several parts which I have shown and described, as obviously, changes may be made in the details thereof without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. A coke wharf having an inclined bed and a pit at the lower end of the bed, a frame in the pit, a feeder in the pit supported by its frame and at the side of and adjacent to the end of the bed, an operator's platform at the opposite side of the pit, there being a space between the feeder and the platform through which the coke from the wharf is passed by the feeder, brackets supported by the frame extending outwardly over the pit from the platform side of the

pit, a gate for the lower end of the wharf, and a gate-supporting frame pivoted to the brackets and extending outwardly from the platform side of the pit toward the wharf, there being a clear coke space between the brackets and the feeder along the entire length of the wharf, substantially as described. .

2. A coke wharf having an inclined bed and a pit at the lower end thereof, a frame in the pit, an operator's platform having one end supported by the frame, there being a space between the end of the wharf and the platform into which coke from the wharf is delivered, brackets supported by the frame and extending outwardly over the

coke-receiving space from the platform toward the wharf, said brackets having seating surfaces on their lower faces for engaging the frame and also having seating surfaces arranged to engage the under side of a platform-supporting portion of the frame, a gate for the lower end of the wharf, and a gate frame pivoted to the ends of the brackets and extending over the coke space, there being a clear coke space below the gate frame and the brackets, substantially as described. 20 25

In testimony whereof, I have hereunto set my hand.

ELLIOTT J. MASON.