

C. J. JEWETT.

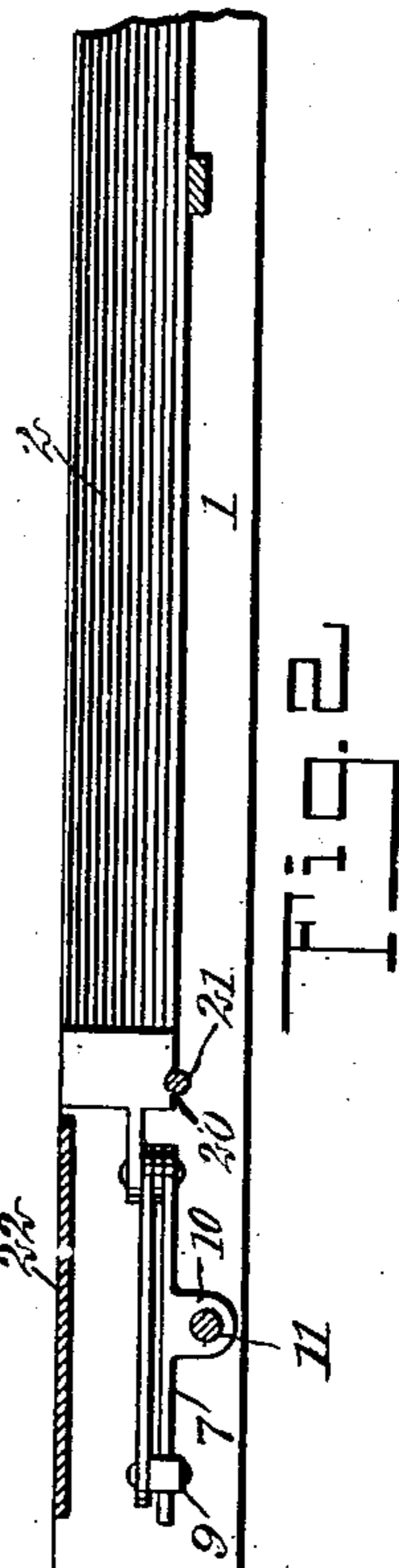
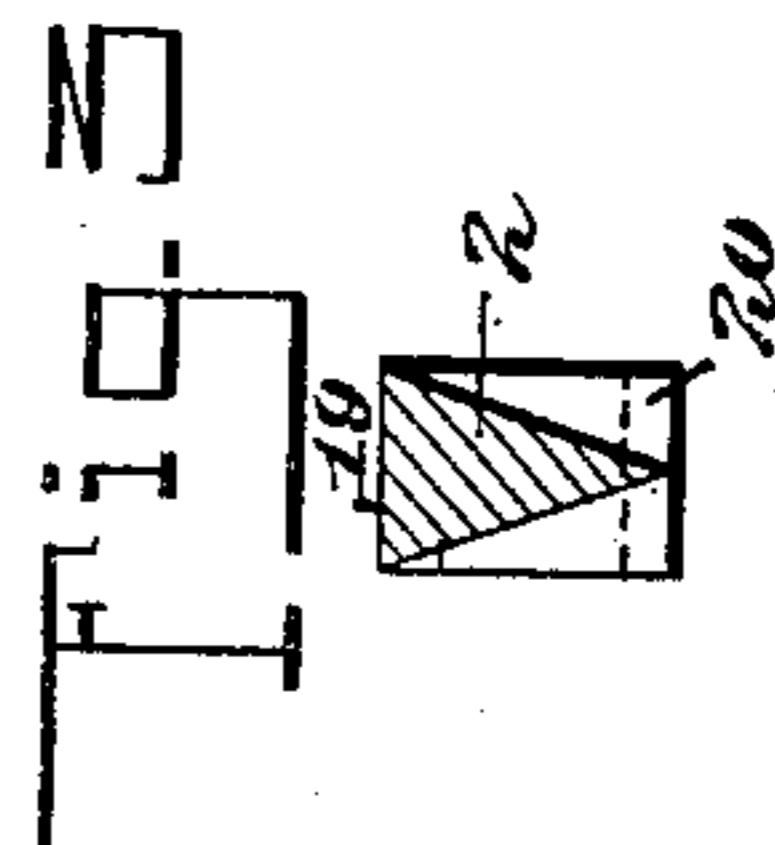
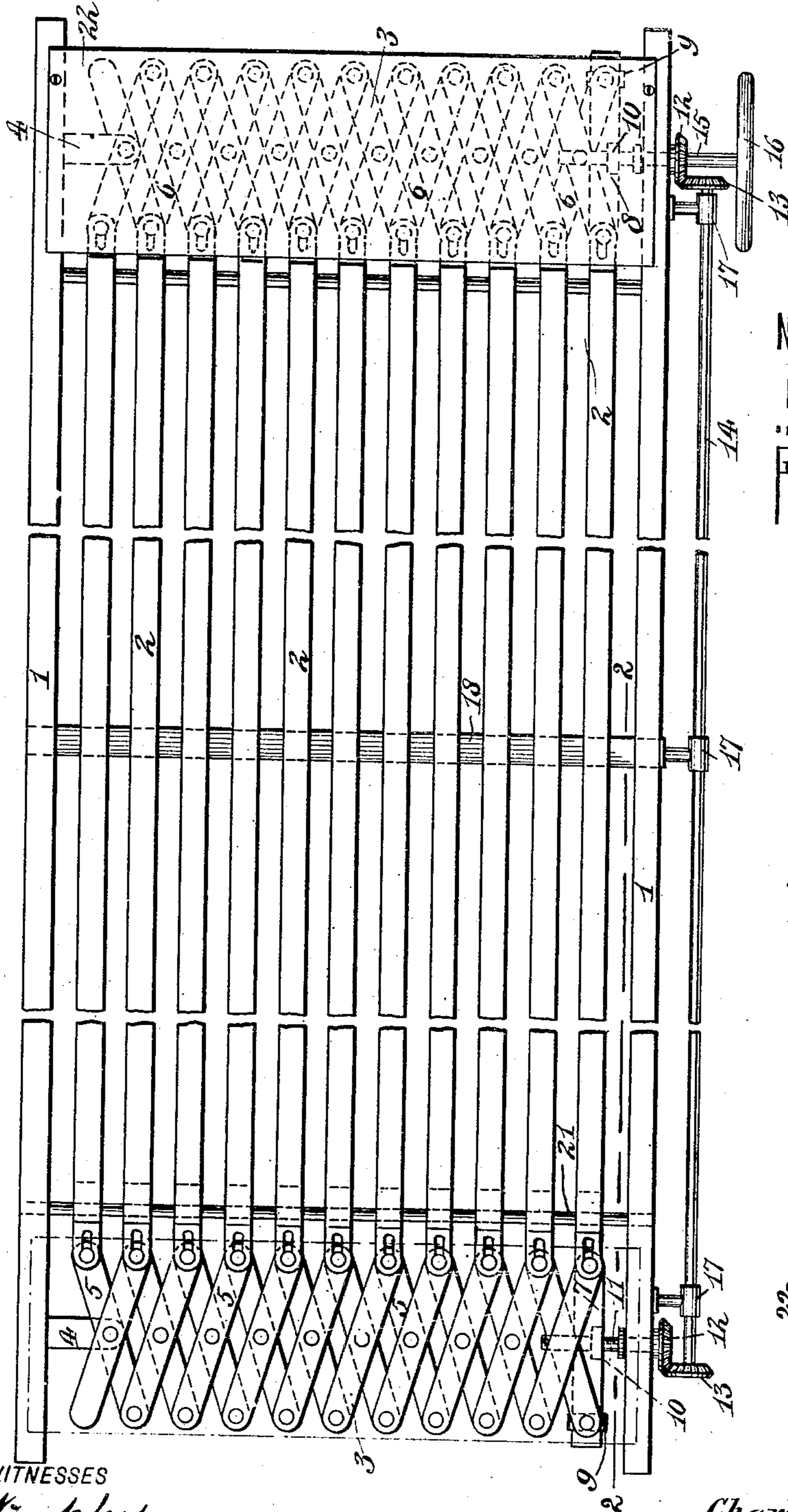
SCREEN.

APPLICATION FILED JULY 21, 1908.

935,516.

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Fig. 1



WITNESSES

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SCREEN.

935,516.

Specification of Letters Patent. Patented Sept. 28, 1909.

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To all whom it may concern:

Be it known that I, CHARLES J. JEWETT, a citizen of the United States, and a resident of Fort Smith, in the county of Sebastian and State of Arkansas, have invented a new and Improved Screen, of which the following is a full, clear, and exact description.

My invention relates to screens which may be used for clay, coal, or other materials, and it has for its object to provide a screen with adjustable screen bars, and means to move the screen bars to predetermined distances from each other.

A special form of screen bar is also provided which is adapted to prevent the material from becoming clogged between the screen bars.

Still other objects of the invention will appear in the following complete description.

In this specification I will describe the preferred form of my invention, but I do not limit myself thereto as I consider myself entitled to all forms and embodiments of the invention which may be held to fall within the scope of the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, in which—

Figure 1 is a plan view of the invention; Fig. 2 is a sectional view on the line 2—2 of Fig. 1, and Fig. 3 is an enlarged cross sectional view showing one of the screen bars.

Referring to the drawings, it will be seen that in my screen, side bars 1 are provided, between which the screen bars 2 are disposed. These screen bars 2 are moved to and from each other by means of lazy tongs 3, which are disposed at either end of the screen bars 2. One end of each of the lazy tongs is secured by means of an arm 4 to one of the side bars 1. These arms 4 are preferably pivoted to one of the center fulcrums of the lazy tongs respectively. The screen bars are loosely pivoted at either end to the levers 5 and 6 of the lazy tongs, so that when the two lazy tongs are extended the screen bars will be moved from each other to parallel positions. As has been stated the lazy tongs 3 are attached by arms 4 to one of the side bars 1 and the lazy tongs are attached to the other side bar 1 in the following manner. The extreme levers 7 and 8 are not parallel with the next adjoin-

ing levers 5 and 6 respectively, but are parallel with the side bar 1, and these levers have sleeves 9 respectively to which are pivoted the next levers 5 and 6 respectively. The levers 7 and 8 are pivotally connected with one of the screen bars 2. To these levers 7 and 8 are secured flanges 10, which have screw threads therein in which mesh screws 11, which are journaled in the side bar 1 and which have outside thereof bevel gears 12, which mesh with bevel gear wheels 13, secured to a shaft 14.

A stem 15 of one of the screws 11 is extended, and to the outer extremity thereof is secured a wheel 16, by which the screw may be turned, and as the screw is turned, it will draw together or extend the lazy tongs 3, which will move the screen bars 2 to the distance therebetween which is desired. The shaft 14 has bearings 17 by which it is supported. Transversely disposed and secured to both of the side bars 1 is a supporting bar 18. In the cross section, screen bars 2 are preferably triangular in form with the apex downwardly disposed and with a flat surface 19 at the top. This construction is used to prevent any clogging of the material between the screen bars, for it will readily be seen that the distances apart of the screen bars will increase toward their lower surfaces. The screen bars on either end have square surfaces at their lower ends, and in these surfaces are cut grooves 20, in which are disposed supporting guides 21. Plates 22 are secured to the side members 1 above the lazy tongs and the mechanism for operating them, leaving exposed between the side bars 1 only the screen bars 2 and the supporting bar 18.

In using my invention, the wheel 16 is turned, thereby operating the bevel gear wheels 12 and 13 and the lazy tongs 3, until the screen bars are the desired distance apart from each other, and the device is ready for use in the usual manner.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a screen, side bars, a plurality of screen bars disposed between the side bars, lazy tongs disposed at either end of the screen bars, one end of each of the lazy tongs being secured to a side bar, the screen bars being attached at either end to levers of the lazy tongs respectively, screws journaled to a second side bar, levers connected to each of

the lazy tongs at one of their ends respectively, having threaded orifices, the screws meshing with the screw threads in the levers, said levers each having sliding engagement with the adjoining levers of the lazy tongs at their other sides respectively, and means to operate the said screws simultaneously.

2. In a screen, side bars, a plurality of screen bars, lazy tongs at either end of the screen bars, one end of each of the lazy tongs being secured to a side bar, the screen bars being attached at either end to the levers of the lazy tongs, and means by which the other end of each of the lazy tongs is attached to the other side bar, the last named means being adapted to operate the lazy tongs.

3. In a screen, side bars, a plurality of screen bars, lazy tongs at either end of the screen bars, one end of each of the lazy tongs being secured to a side bar, the screen bars being attached at either end to levers of the lazy tongs, and means by which the other end of each of the lazy tongs is attached to the other side bar, the last named means being adapted to operate the lazy tongs, and means to operate the said last named means simultaneously.

4. In a screen, side bars, a plurality of screen bars disposed between the side bars, lazy tongs, one at each end of the screen bars, one end of each of the lazy tongs being secured to a side bar, the screen bars being attached at both ends to levers of the lazy tongs, screws journaled to a second side bar, levers having threaded orifices connected to each of the lazy tongs respectively, the screws meshing with the screw threads in the levers respectively, and means to operate the screws simultaneously.

5. In a screen, a plurality of screen bars, two lazy tongs, each consisting of a plurality of levers, each of which is disposed across and is pivoted to a neighboring lever,

the inner terminals of the end levers and the terminals of the other levers being each pivoted to a terminal of a neighboring lever, the lazy tongs being disposed one at each end of the screen bars and the inner sides of the levers of the lazy tongs being loosely pivoted to the screen bars respectively, and means to operate the lazy tongs.

6. In a screen, a plurality of screen bars, two lazy tongs, each consisting of a plurality of levers, each of which is disposed across and is pivoted to a neighboring lever, the inner terminals of the end levers and the terminals of the other levers being each pivoted to a terminal of a neighboring lever, the lazy tongs being disposed one at each end of the screen bars and the inner sides of the levers of the lazy tongs being pivoted to the screen bars respectively, and means engaging both sides of each of the lazy tongs by which they may be operated.

7. In a screen, a plurality of screen bars, two lazy tongs, each consisting of a plurality of levers, each of which is disposed across and is pivoted to a neighboring lever, the inner terminals of the end levers and the terminals of the other levers being pivoted to a terminal of a neighboring lever, the lazy tongs being disposed one at each end of the screen bars and the inner sides of the levers of the lazy tongs being pivoted to the screen bars respectively, means engaging both sides of each of the lazy tongs at one of their ends by which they may be operated, and side arms secured to the side bar, the central pivots at the other end of the lazy tongs being secured to the said arms.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES JAMES JEWETT.

Witnesses:

H. N. HALL,
J. R. YOUNG.