(No Model.)

A. GAREE.

DEVICE FOR HANDLING SEWER PIPE.

No. 484,707. Patented Oct. 18, 1892.

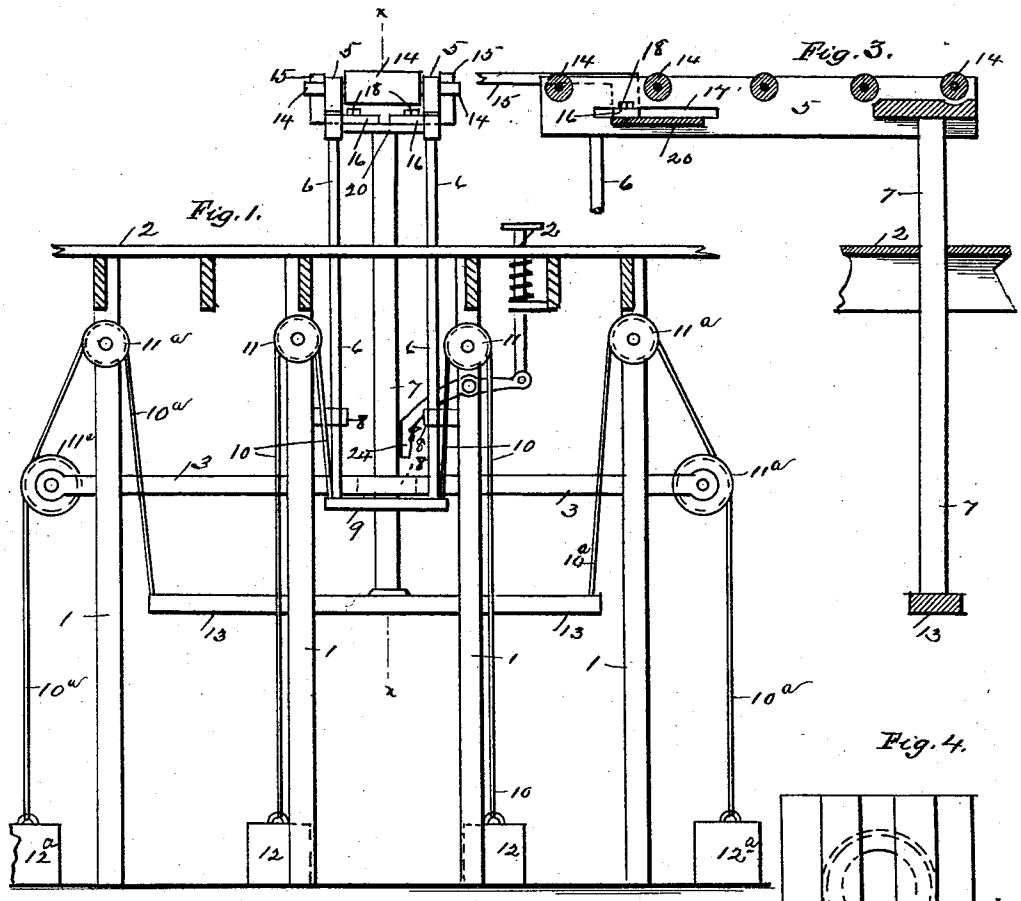

Fig. 1.

Fig. 3.

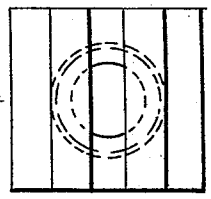

Fig. 4.

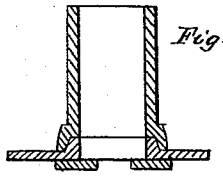

Fig. 5.

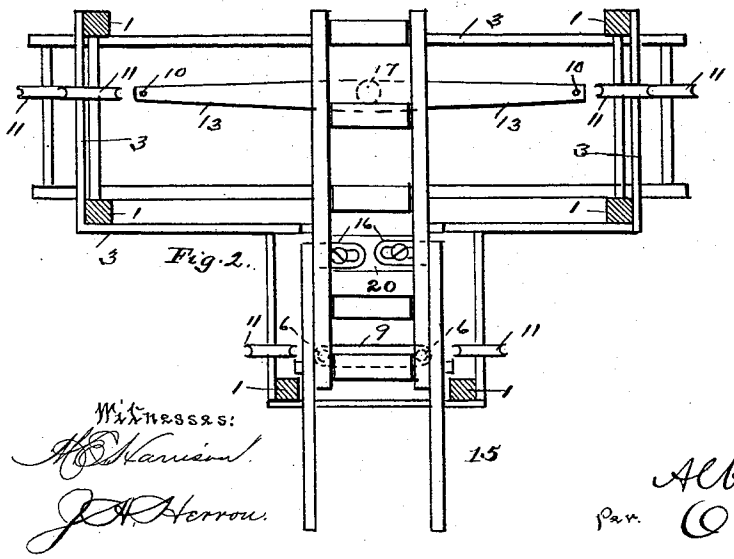

Fig. 2.

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UNITED STATES PATENT OFFICE.

ALBERT GAREE, OF NEW CUMBERLAND, WEST VIRGINIA.

DEVICE FOR HANDLING SEWER-PIPE.

SPECIFICATION forming part of Letters Patent No. 484,707, dated October 18, 1892.

Application filed May 19, 1891. Serial No. 393,335. (No model.)

To all whom it may concern:

Be it known that I, ALBERT GAREE, a citizen of the United States, residing at New Cumberland, in the county of Hancock and State of West Virginia, have invented certain new and useful Improvements in a Device for Handling Sewer-Pipe; 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to apparatuses for handling sewer-pipe during the manufacture of the same, and particularly to the construction of the table proper thereof, its object being to provide a table for apparatuses of the class described which can be extended longitudinally to connect the apparatus with the press and also adjustable to accommodate pipes of different diameters.

To this end, the invention consists in certain novel features in the construction of the table, substantially as hereinafter described, and particularly pointed out in the subjoined claims.

I have shown in the accompanying drawings my table as employed with an apparatus for handling sewer-pipe, which will automatically sink to the level of the floor under the weight of the pipe being handled and rise to its former position when relieved of the weight of said pipe; but my invention is equally adapted for use with apparatus which are raised and lowered by the operator or operators.

In the drawings, Figure 1 is a side elevation of an apparatus for handling sewer-pipe, provided with my improved table. Fig. 2 is a plan view of the same, having the floor of the apparatus removed, showing particularly the construction of my improved table. Fig. 3 is a side sectional view of a table for an apparatus of the class described. Fig. 4 is an inverted plan view of one of the base-boards on which the pipe is removed from the press; and Fig. 5 is a sectional elevation of the same, showing a sewer-pipe in section resting thereon.

To put my invention into practice with an apparatus of the class above described for handling sewer-pipe, I construct beneath the floor of the working-room a frame, consisting of a series of vertically-arranged posts 1, joined to the rafters of the floor 2 and suitably braced by cross pieces 3. Operating within this frame 1 and through an oblong opening formed in the floor 2 is a roller-table 5, capable of a limited vertical movement and adapted to remain when at rest a short distance above the floor 2. This table 5 is mounted on three downwardly-extending bars 6 7, which pass through suitably-arranged guides 8. Two of these bars 6 are attached to the front of the table and their lower extremities attached together by a bar 9, and the said bar 9 connected to ropes 10, which pass over suitably-arranged sheaves 11 and are connected to large counter-weights 12. The rear supporting-bar 7 also passes through a guide and is provided at its lower end with a cross-bar 13, which is attached to counter-weights 12^a by means of a series of sheaves 11^a and ropes 10^a. Mounted in the table 5 are a series of rollers 14, arranged along the entire length of the same and at regular intervals.

To retard the vertical movement of the table 5, it is necessary to provide a brake mechanism. One form of braking mechanism which is especially adapted for use with apparatus of this class is shown in Fig. 1, and consists of a brake-shoe 24, so arranged that its inner end will be adjacent to the bar 7 and pivoted intermediate of its length to one of the posts 1. This brake-shoe is operated by a treadle 25, which extends through the floor 2, has its lower end pivotally connected to the rear end of the brake-shoe, and is encircled by a coiled spring 26, which has its abutments formed by the floor 2 and the horizontal portion of a frame 27 and serves to keep said treadle normally in its uppermost position, and consequently the brake-shoe away from the bar 7.

To adapt a table of the above construction for my improvement, I make the journals of the front or first roller 14 of such lengths that they will project beyond the sides of the frame of the table and support thereon two extension-pieces 15, which are adapted to be drawn out and to come within reach of a press for forming the sewer-pipe. These extension-pieces 15 are each provided at their inner

ends with an inwardly-projecting portion 16, which extends through slots 17, formed in the frame of the table 5, and the said portions attached by set-screws 18 to a sliding block 20 in a manner that the said extension-pieces may be adjusted sidewise toward or away from the table to accommodate large and small pipe.

In the manufacture of large sewer-pipe weighing several hundred pounds it is necessary to move the same from the press, which is necessarily constructed several feet above the level of the floor 2, and as the pipe are yet "green" or not burned and must be turned or inverted, great care must be used in the handling the same, as it is all done by manual labor, requiring the service of several workmen.

To remove a large sewer-pipe from the press and also turn or invert the same by this apparatus, the extension-pieces are drawn out of the table within reach of the press and the pipe, which has been formed on a base-board, such as shown at Figs. 4 and 5 on the drawings, moved on to the said extension 15 and slid over the same on to the rollers of the table to the rear end of the same. The weight of the pipe is such as to lift the weights 12 and 12^a and bring the table to the level of the floor 2. Another base-board of a suitable construction is placed on the top of the pipe and the same tilted over, and when the table has been partially relieved of its load the same by the action of the weights moves upward and the rear roller 14, resting against the side of the pipe, materially assists in the turning of the pipe over.

By the use of this apparatus for removing sewer-pipe from presses and turning the same the services of two workmen are dispensed with and the labor made easy and the percentage of breakage greatly reduced, and, also, the pipe may be removed from the press quickly, and thereby leave the press free to be operated more rapidly.

Having thus described my invention, I claim—

1. In an apparatus for handling sewer-pipe, the combination, with the table, of an extension-frame projecting from one end thereof, said extension-frame being adjustable longitudinally of the table to connect the latter with the press and the sides thereof being adjustable laterally toward and from each other, thereby permitting said extension-frame to accommodate pipes of different diameters, substantially as described.

2. In an apparatus for handling sewer-pipe, the combination, with the table having slots, of a sliding extension-frame consisting of side bars having inward projections received by said slots, and a sliding block 20, secured to said inward projections in a manner to permit said bars to slide longitudinally of the table to connect the latter with a press and laterally toward and from each other to accommodate pipes of different diameters, substantially as described.

In testimony that I claim the foregoing I hereunto affix my signature this 5th day of May, A. D. 1891.

ALBERT GAREE. [L. S.]

In presence of—
CHARLES LARGE,
M. E. HARRISON.