

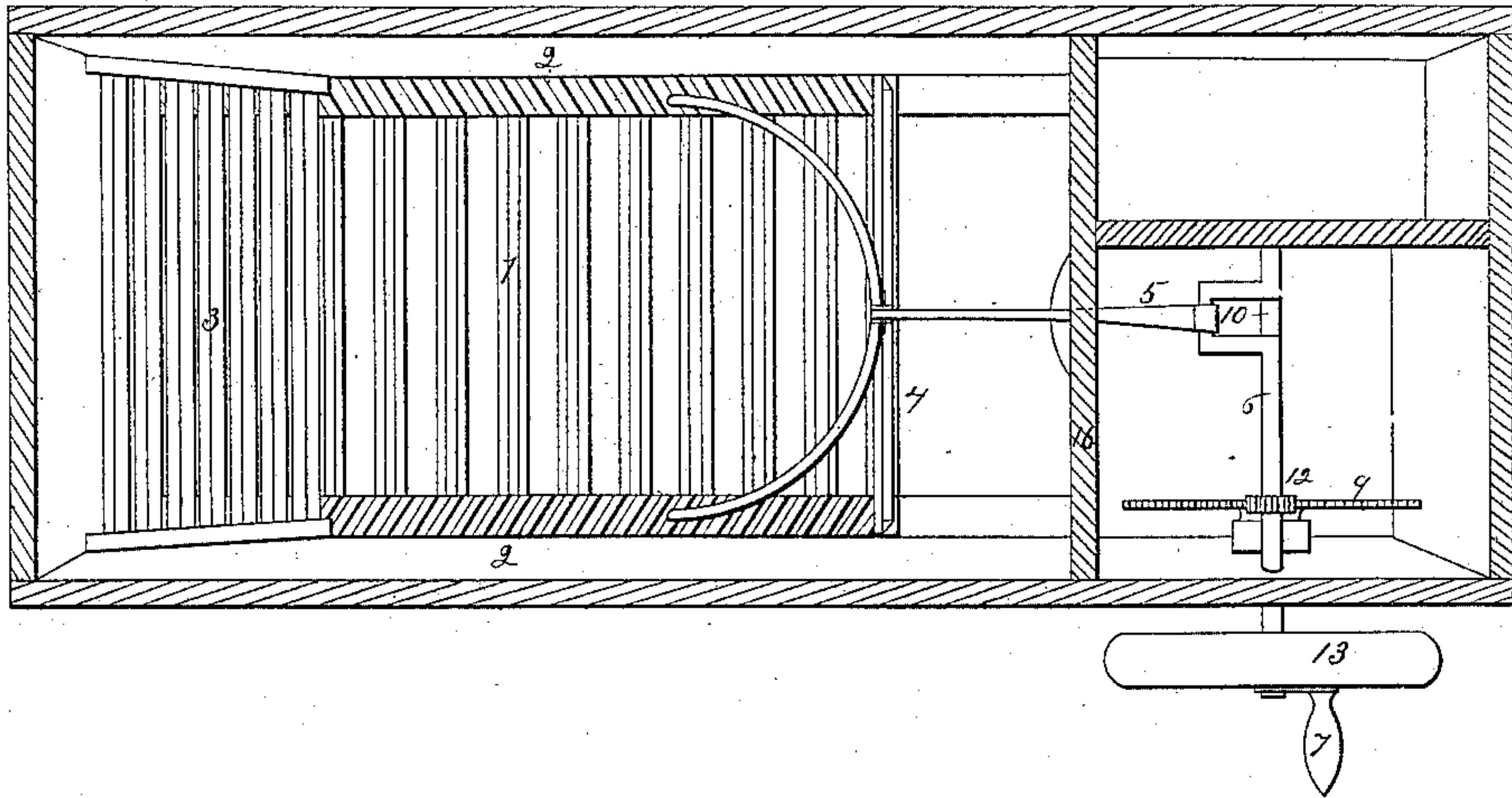
C. E. Toop,

Washing Machine,

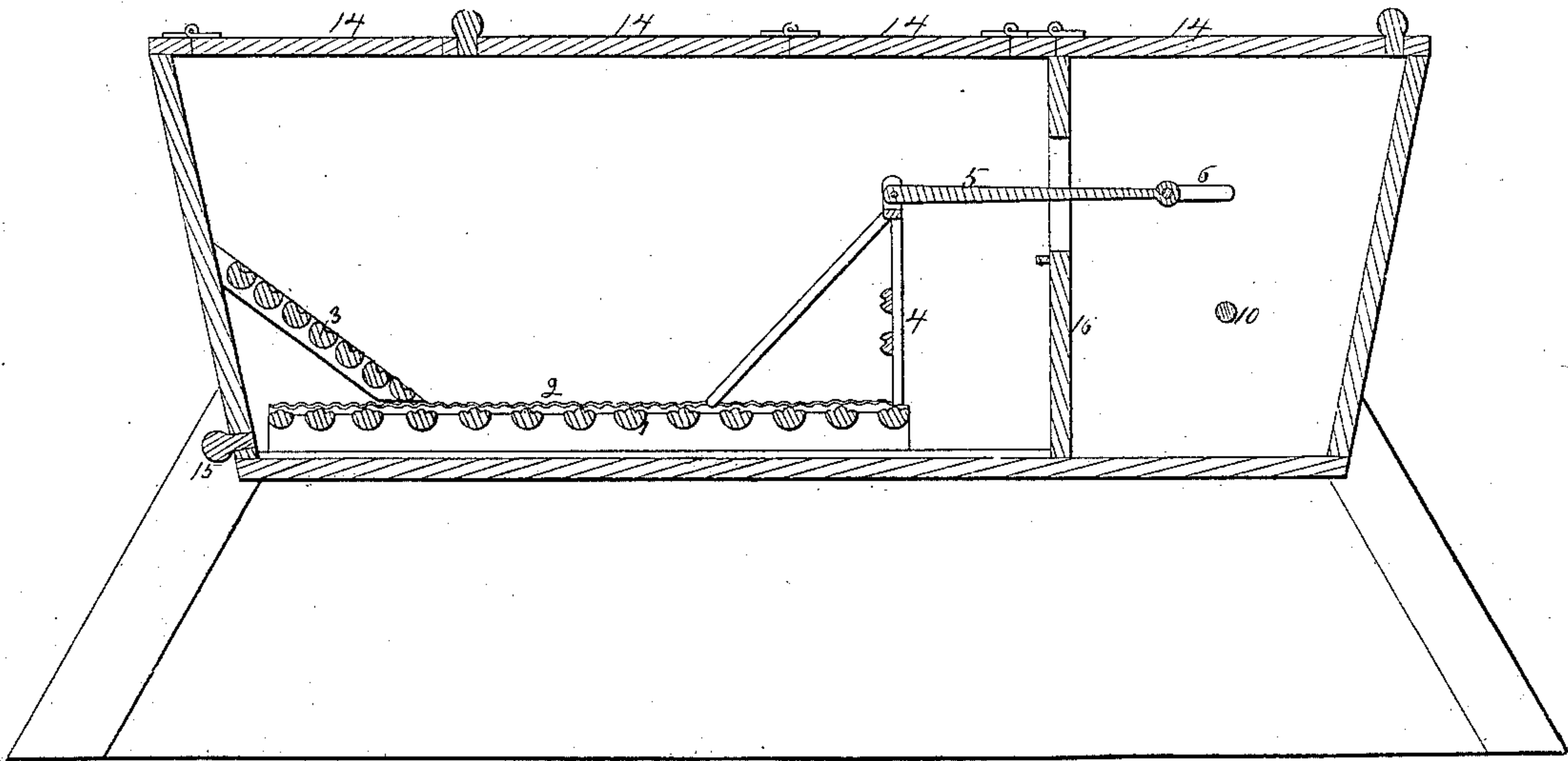
N^o 31,636.

Patented Mar. 5, 1861.

Fig; 1.



Fig; 2.



Witnesses;

Chas. W. Thompson
J. C. James Weston

Inventor;

Chas. E. Toop
By Thos. B. How
att'y

UNITED STATES PATENT OFFICE.

CHARLES E. TOOP, OF NEW YORK, N. Y.

WASHING-MACHINE.

Specification of Letters Patent No. 31,636, dated March 5, 1861.

To all whom it may concern:

Be it known that I, CHARLES E. TOOP, of New York, in the county of New York and State of New York, have invented an
5 Improvement in Washing-Machines, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent
10 and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in the arrangement of parts in combination with each
15 other as hereinafter described by which a more efficient action is obtained and the clothes are more violently agitated, and, at the same time, are turned over in a mass so that a different portion of them is suc-
20 cessively brought in contact with a stationary wash-board which is placed in an oblique position, slanting upward and outward, and with the horizontal reciprocating bed, which is caused to vibrate by a crank connected to
25 suitable gearing. Also in the combination with the above mentioned devices of two side rails which form the outside portion of said reciprocating bed and upon which the clothes partly rest; said rails being so grooved or
30 corrugated as to tend to throw the clothes into the center of said bed when the machine is operated as I have hereinafter more fully set forth.

In the accompanying drawings, Figure 1
35 is a sectional plan of my machine showing all the parts below a horizontal plane passed through the machine at the elevation of the line x, x , Fig. 2. Fig. 2 is a vertical longitudinal section, showing all
40 the parts beyond the line y, y , as drawn through Fig. 1.

1 is the reciprocating bed upon which the clothes are placed in order to be washed. 2, 2,
45 are the side rails of said bed, corrugated as seen in Fig. 1, by which corrugation the clothes, as the bed carries them toward the wash board 3, are drawn or crowded into the center thereby reducing the friction of the clothes against the sides of the box or
50 receptacle, and facilitating the motion of the clothes in that direction; while, on the contrary, the motion of the clothes from the said wash-board is retarded by the reverse action of the corrugations during the back-
55 ward motion of the bed.

The clothes partly resting upon the wash-

board are, in a measure prevented from being carried from the board which, in combination with the effect of the corrugations just mentioned, causes a packing in of the
60 clothes at that end of the machine at the bottom, which gradually turns the mass over, and brings all parts in succession against the washboard 3, and bed 1.

The central portion of the bed 1 is formed
65 of corrugated bars the form of which is seen clearly in Fig. 2. The washboard is similarly corrugated. The bed extends under the washboard so that when at its extreme outward position the end still extends
70 a short distance under the said wash-board. This prevents the clothes from being forced partly under the washboard and torn.

4 is the end piece of the bed, placed at right angles thereto. It keeps the clothes
75 on the bed and furnishes a convenient point to attach one end of the connecting rod 5 to. This rod is connected at the other end to a crank in the shaft 6, by which, when the outside crank 7 is turned, the bed is caused
80 to vibrate. The connection between these two cranks, the first on shaft 6, and the other on shaft 10, is made by a cog-wheel 9, on shaft 10, working into a pinion 12, on shaft 6.
85

13 is a fly-wheel which equalizes the motion of the working parts.

14, 14, are covers or lids by which access is obtained to the inner parts of the machine.

15 is a plug by the removal of which the
90 water is withdrawn when desired.

16 is a partition, water-tight, separating the gearing and the water.

Having thus fully described my invention, I claim—
95

1. The combination of the corrugated bed 1, and corrugated wash-board 3, arranged as hereinbefore described, with the gearing for giving motion to said bed, the whole being
100 so arranged and combined as to violently agitate the clothes at the same time that they are gradually turned over, so as to bring a different portion of the mass successively in contact with the washboard and bed.

2. The combination with the above men-
105 tioned devices, of the two rails or side pieces, 2, 2, corrugated as described and represented for the purpose herein specified.

CHAS. E. TOOP.

Witnesses:

CHAS. W. THOMPSON,
THOS. P. HOW.