W. W. COOLEY.

HAND TAMPER.

APPLICATION FILED DEC. 20, 1910.

1,007,536.

Patented Oct. 31, 1911.

Fig. 1.

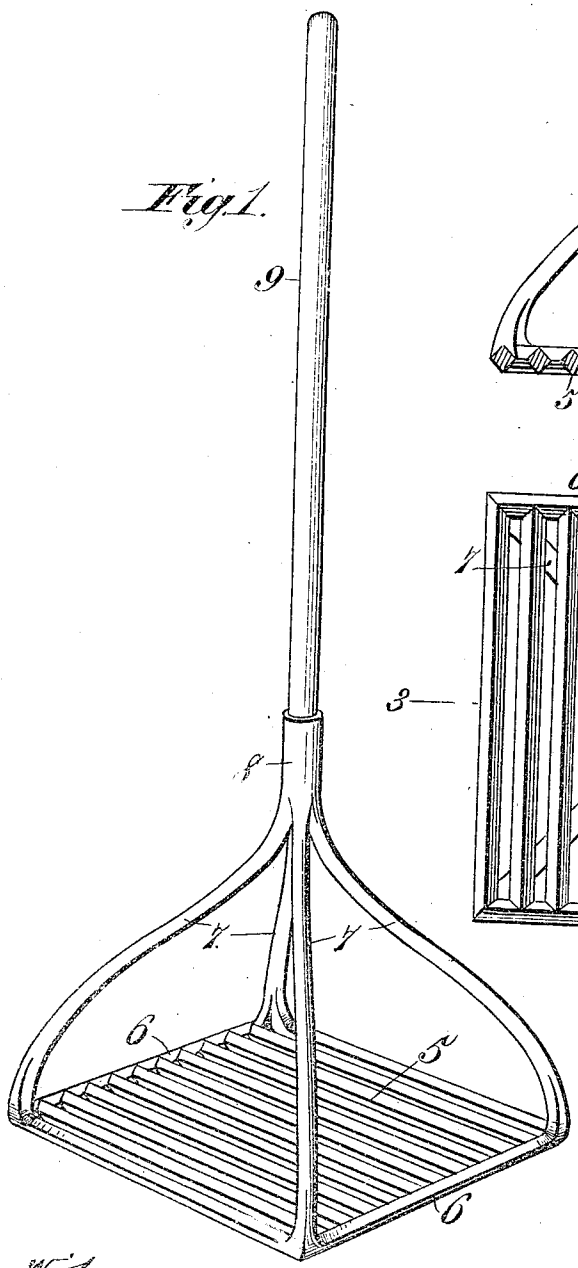


Fig. 3.

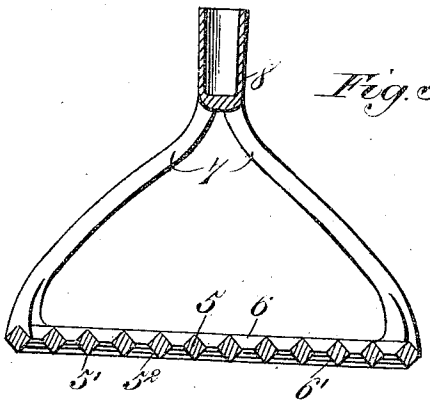
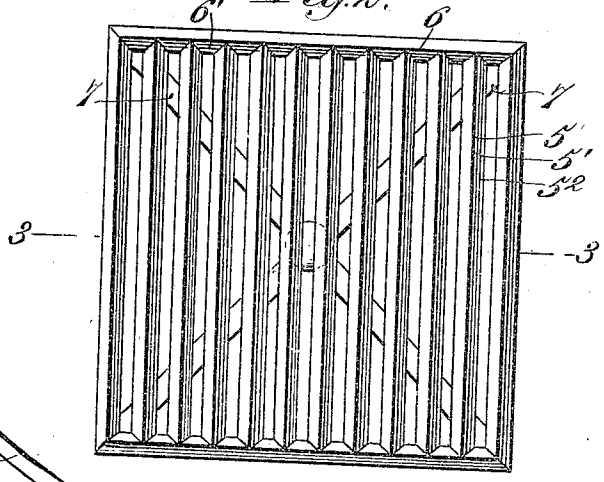


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

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HAND-TAMPER.

1,007,536. Specification of Letters Patent. Patented Oct. 31, 1911.

Application filed December 20, 1910. Serial No. 598,305.

To all whom it may concern:

Be it known that I, WARD W. COOLEY, a citizen of the United States, residing at Clinton, in the county of Clinton and State of Iowa, have invented new and useful Improvements in Hand-Tampers, of which the following is a specification.

The present invention is an improved device for tamping cement or concrete walks, and it comprehends, broadly, the production of a tamper so constructed as to admit of the cement or concrete mixture forming the body of the walk to be tamped in such a manner as to render the usual separate or additional coating unnecessary.

In constructing cement or concrete walks, it is customary, at present, to first lay a mixture of coarse gravel and cement, which is then compressed as solidly as possible by means of a tamper having a flat working surface or bottom. Upon the body thus formed there is subsequently laid a top dressing or finish of cement and fine sand, and the two layers, *i. e.*, the body and the top dressing, are finally united by pressure. The difficulty arises, however, that the top layer will not adhere perfectly to the solid body but will unite therewith only in certain places, and will, in a short time, crack and peel off at the points where the adhesion is not complete, thus marring the appearance of the walk, as will be understood. To overcome this defect, the improved tamper is constructed of spaced bars which are angular in cross section and are set with their angular edge portions directed downward, such arrangement enabling said edge portions to force the coarse gravel or small stones toward the bottom of the mass, while, at the same time, permitting the fine mixture of sand and cement to work upward between the bars, so as to form the top dressing.

A structural embodiment of the invention is illustrated in the accompanying drawing, wherein—

Figures 1 and 2 are, respectively, a perspective view and an inverted plan view of the improved tamper, and Fig. 3 is a transverse vertical section taken on the line 3—3 of Fig. 2.

As shown in said drawing, the working portion of the implement or tamper proper consists of a flat grid-like frame comprising a series of body bars 5 arranged in a common plane in spaced parallel relation and connected at their ends to cross-bars 6, the latter bars occupying the same plane as the first-named bars and having their ends joined to the lower ends of a series of upwardly and inwardly directed arms 7 which are united at their upper ends to a socket 8 that receives the lower end of a pole 9 or other suitable straight handle. The said socket is located substantially in alinement with the central point of said frame, and the pole, therefore, is likewise arranged substantially in alinement with said central point and perpendicularly to the plane of said frame.

The body bars 5 are of polygonal cross section, the angular edge portions thereof being directed downward. In the present construction, these bars have a rectangular or lozenge-shaped cross section, and their lower longitudinal edges 5′ constitute the effective portions thereof. The side angles 5^2 of mutually-adjacent bars lie directly opposite and in line with each other, and are spaced at slight distances apart. The cross-bars 6 may be, and preferably are, identical in construction with the body bars 5, and their lower angles or angular longitudinal edges 6′ are directed downward in the same manner as the corresponding edges 5′ of said body bars. The several bars 5 and 6, as well as the arms 7 and socket 8, are constructed of metal, and the implement as a whole is intended to be operated manually, as will be understood.

During the tamping operation, the effective edges 5′ and 6′ of the bars 5 and 6 will strike against the small stones and coarse gravel in the mass and will force the same downward therein, while the mixture of fine sand and cement will work upward between the bars and will form the top dressing. Thus it will be seen that the mass will be formed into a solid walk without rendering the application of the usual top dressing necessary.

I claim as my invention:

1. A tamper comprising a flat grid-like frame consisting of a series of spaced parallel bars connected together and having lower longitudinal working edges which are angular in cross section; and a handle connected to said frame at right angles to the plane thereof and arranged in alinement with the center of said frame.

2. A tamper comprising a flat grid-like frame consisting of a series of spaced parallel body bars occupying a common plane, and cross-bars connecting the ends of said

body bars and arranged in the same plane therewith, all of said bars having lower longitudinal working edges which are angular in cross section; and a handle connected to said frame at right angles to the plane thereof and arranged in alinement with the center of said frame.

3. A tamper comprising a flat grid-like frame consisting of a series of spaced parallel bars connected together and having lower longitudinal working edges which are angular in cross section; a series of arms connected to said frame and extending upwardly and inwardly from the corners thereof; a socket to which the upper ends of said arms are connected disposed above and in alinement with the center of said frame; and a straight handle fitted at its lower end in said socket and arranged at right angles to the plane of said frame.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WARD W. COOLEY.

Witnesses:
J. H. EDENS,
F. G. HANSEN.