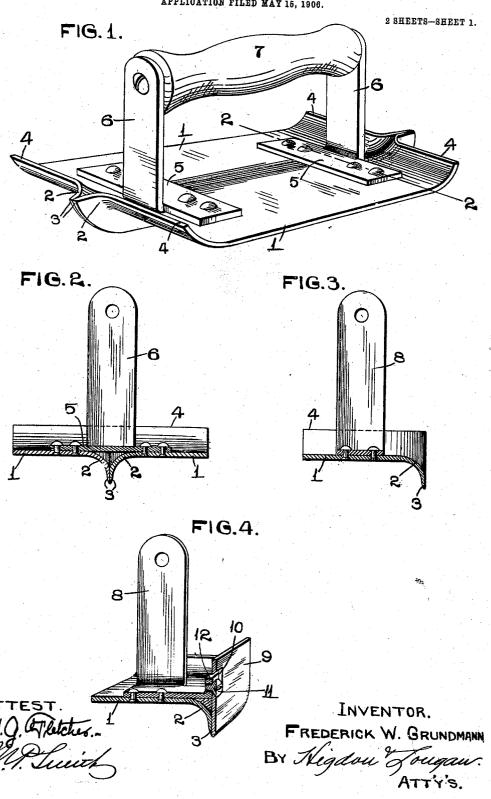
## F. W. GRUNDMANN. CEMENT WORKER'S TOOL. APPLICATION FILED MAY 15, 1906.



THE NORREL PETENS CO., WASHINGTON, D. C.

No. 867,819.

PATENTED OCT. 8, 1907.

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2 SHEETS-SHEET 2.

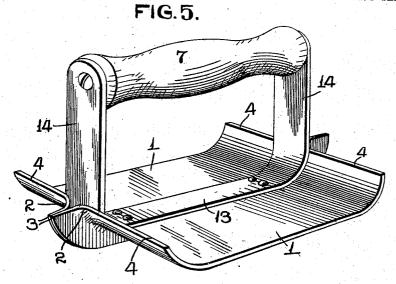
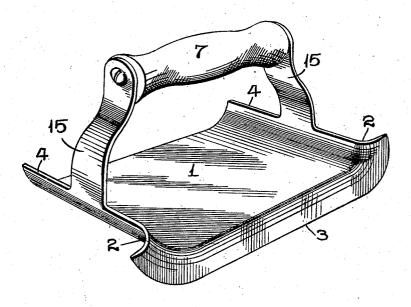


FIG.6.



ATTEST.

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## UNITED STATES PATENT OFFICE.

FREDERICK W. GRUNDMANN, OF ST. LOUIS, MISSOURI, ASSIGNOR TO CRESCENT NOVELTY MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

## CEMENT-WORKER'S TOOL.

No. 867,819.

Specification of Letters Patent.

Patented Oct. 8, 1907.

Application filed May 15, 1906. Serial No. 317,016.

To all whom it may concern:

Be it known that I, FREDERICK W. GRUNDMANN, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Cement-Workers' Tools, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in cement 16 workers' tools, and the object of my invention is to construct a simple, inexpensive tool, which is used by cement and granitoid workers for grooving and finishing off composition sidewalks.

A further object of my invention is to construct a 15 cement workers' tool of sheets or plates of hardened metal, which are pressed into the desired form, and which may be combined in different ways, so as to provide different forms of tools.

To the above purposes, my invention consists of cer-20 tain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of one of the principal 25 forms of my improved tool; Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1; Fig. 3 is a vertical section analogous to Fig. 2, and showing a tool constructed of a single plate, and adapted for rounding off the corners of a concrete sidewalk, or curb; Fig. 4 is a description of the tool seen in Fig. 3; Fig. 5 is a perspective view of a grooving tool similar to the tool seen in Fig. 1, and provided with a modified form of handle frame; Fig. 6 is a perspective view of a tool constructed of a single plate, and with the handle frames formed integral with the ends of said plate.

In the construction of my improved tool, I make use of plates 1, of hardened sheet metal, such as steel, and by suitable means turn one edge of each plate down-40 wardly on a short curve, as indicated by 2, so that the extreme lower edge 3 occupies a vertical plane at right angles to the plane occupied by the body of the plate 1. Both ends 4 of each plate 1 are bent upwardly on sharp curves, and in so doing the ends of the downwardly 45 bent edges 3 are likewise curved upwardly.

In forming a tool for grooving cement and granitoid work, I take a pair of plates 1, having their edges and ends properly bent, as described, and place the downwardly bent side edges of said plates together, and thus a larger plate is formed, with a downwardly projecting rib extending longitudinally from one end of said plate to the other. Riveted to the top sides of the pair of plates so arranged are transversely disposed plates 5, with each of which is formed integral an up-

wardly projecting arm 6, and positioned between and 55 fixed to the upper ends of these arms 6 is a handle 7. The tool thus formed is adapted to be used on all kinds of cement and granitoid work for the purpose of forming grooves, or creases, therein, and said tool being constructed of hardened metal will resist wear and, as 60 the plates are constructed of malleable sheets of metal, they will not break in falling on stone pavement, or by being struck by heavy tools and the like, as is the case where cast tools are made use of.

In constructing a tool used for rounding off corners of concrete pavements, and curbing, one of the plates 1 is made use of, and provided adjacent its ends with vertically extending arms 8, between the upper ends of which is arranged the handle 7, (see Fig. 3.) In some instances, the tool constructed of a single plate 1 70 is provided on its downwardly turned edge with a vertically adjustable plate 9, in which is formed vertical slots, such as 10, and through which pass set screws, such as 11, the same entering vertically disposed projections, such as 12, which are integral with the lower 75 ends of the extending arms 8. The plate 9 in this construction is adjustable vertically, and locked by means of the set screws 11, and thus provides a wide vertical face when the tool is being used in corners.

In Fig. 5 I have shown a tool constructed of two 80 plates, the same being held together by a longitudinally disposed strap 13, which covers the groove between said plates, formed between the downwardly bent edges; and the ends 14 of this strap extend vertically upward, and fixed between the upper ends thereof is 85 the handle 7.

In Fig. 6 I have shown a tool constructed of a single plate 1, and integral with the upwardly bent ends thereof are upwardly extending arms 15, between which is fixed the handle 7.

A tool of my improved construction is easily and cheaply manufactured, is simple, strong, and durable, is very light in weight and very effective in use in grooving and finishing off cement and granitoid work.

I claim:-

As a new article of manufacture, a cement workers' tool, comprising a pair of sheet metal plates having smooth bottom surfaces and having their meeting edges bent downwardly to form a longitudinally extending centrally disposed rib on the under side of the tool, both ends of which plates, together with the edges forming the ribs, being curved upwardly, means whereby the plates are rigidly connected, and a handle carried by the plate connecting means.

In testimony whereof, I have signed my name to this 105 specification, in presence of two subscribing witnesses.

FREDERICK W. GRUNDMANN.

Witnesses:

M. P. SMITH, EDW. M. HARRINGTON.