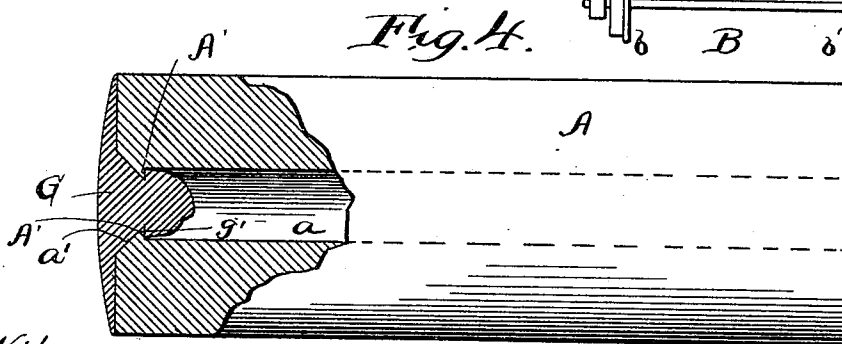
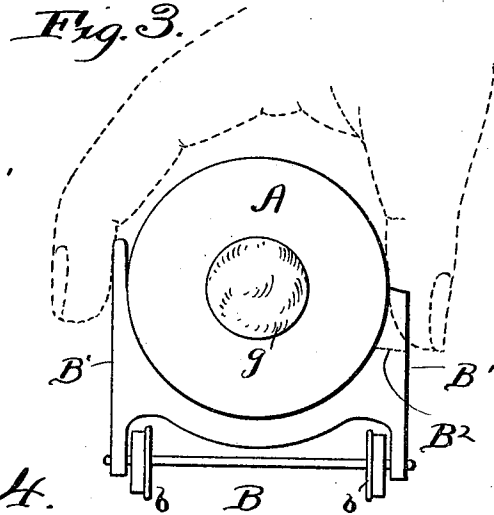
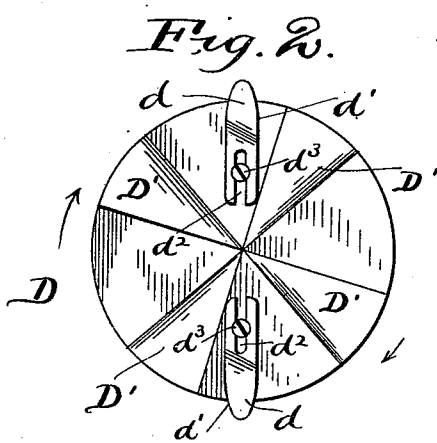
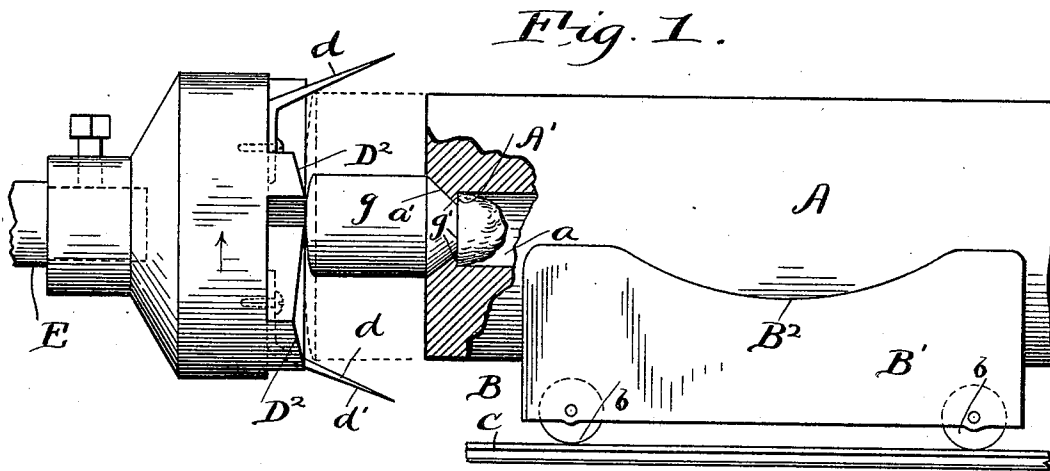


(No Model.)

M. B. & F. J. MISHLER.
MACHINE FOR MAKING GRAVE OR LOT MARKERS.

No. 520,652.

Patented May 29, 1894.



Witnesses:
E. B. Gilchrist.
Crover

Inventors
Milton B. Mishler
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UNITED STATES PATENT OFFICE.

MILTON B. MISHLER, OF RAVENNA, AND FRANK J. MISHLER, OF MOGADORE,
OHIO.

MACHINE FOR MAKING GRAVE OR LOT MARKERS.

SPECIFICATION forming part of Letters Patent No. 520,652, dated May 29, 1894.

Application filed September 21, 1893. Serial No. 486,082. (No model.)

To all whom it may concern:

Be it known that we, MILTON B. MISHLER, residing at Ravenna, in the county of Portage, and FRANK J. MISHLER, of Mogadore, in the county of Summit, State of Ohio, have invented certain new and useful Improvements in Machines for Making Grave or Lot Markers; and we 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.

Our invention relates to improvements in apparatus for making grave and lot-markers; and it consists in certain features of construction and in combination of parts hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of suitable apparatus employed in the manufacture of the marker, a portion of the marker being in section. Fig. 2 is an elevation of the working-face of the tool employed in forming the face or cap of the marker. Fig. 3 is an end elevation of the carriage employed for supporting the body of the marker in the process of forming the face or cap upon said body. Fig. 4 is a side elevation, partly in central longitudinal section, of a finished marker.

The body A of the marker having been made of ordinary clay, in any suitable manner, the same is mounted upon a suitable carriage, B, the carriage shown having wheels, b, engaging a suitable track or ways C. The sides, B', of the carriage extend upwardly, preferably far enough to embrace the lower half of the body of the marker, as shown in Figs. 1 and 3, one of said sides being cut away, however, as at B², to enable the operator in straddling the marker with the thumb and fingers of one hand, to place the thumb against one side of the body of the marker, with the fingers engaging the carriage on the other side of the marker, as shown in Fig. 3, so that the operator, has a positive hold on both the carriage and marker in moving the latter endwise for the purpose hereinafter made apparent. The track or ways, upon which the carriage is mounted, are in line with a spreading and trimming-tool D that is operatively mounted upon a rotating shaft,

E, that is driven in any suitable manner, tool D being designed for use in forming the face or cap G of the marker and trimming the same as required, which cap or face receives the distinguishing number, character or mark (not shown).

We would here remark that the face or cap of the marker is preferably made of a superior grade of clay or suitable substance that is practically impermeable to water or moisture and will shrink less than the material of which the body of the marker is composed when the whole is subsequently burned in a kiln. We would also remark that, in making the body of the marker, a hole a is centrally formed therein, said hole extending preferably from end to end of the body of the marker, and the one end of the hole, at the location of the cap or face of the marker, flaring outwardly, as at a', and the body-portion of the marker having an inwardly-presenting shoulder A' at the inner and smaller end of the flaring portion of said hole, said shoulder being engaged by a shoulder g' formed on the chunk or plug, g, of soft suitable clay or somewhat elastic substance, by the spreading or expansion of said plug or chunk of material upon its insertion into and somewhat beyond the inner and smaller end of the flaring portion of hole a, said plug or chunk being of such size that, upon the insertion of the same into the body portion of the marker as hereinbefore described, there will remain projecting outside a sufficient quantity of material from which to form the face or cap G of the marker. This formation of the marker-cap or face is effected by means of the aforesaid spreading and trimming-tool. The plug or chunk of material g, having been inserted, the carriage and load are moved by hand endwise to bring the outer end of the protruding chunk or plug into engagement with the working-face of the spreading and trimming-tool. The latter consists preferably, of a stock, whose facial diameter is equal to the diameter of the largest size of marker designed to be operated upon by the tool. The tool has any suitable number of blades D' arranged at suitable intervals radially upon its face, the working sides of said blades receding in the direction of rotation, as at D². Said

blades are adapted to engage and spread the material of the projecting chunk or plug from the center outwardly to the periphery of the respective end of the body of the marker, 5 thereby forming the cap or face for said end of the body of the marker, which cap or face, is designed to receive, as already indicated, the distinguishing number, character or mark of the marker. The marker is, of course, fed 10 as required toward the spreading-tool during the operation of the latter. Said tool at any suitable number of points, is also shown provided with projecting-blades or cutters *d* adapted to trim the edge of the cap or face 15 of the marker flush with the periphery of the body of the marker, removing any surplus material. Cutters or blades, *d*, of course, have their cutting or trimming-edges *d'* located in a direction in which the tool rotates, and are 20 preferably adjustable toward and from the center of the tool to render them adapted for operating upon different sizes of markers. The adjustable feature referred to is preferably attained by elongating the holes *d*², 25 through which extend the screws or devices *d*³ that secure the trimming-blades or cutters in position.

We would here remark that in burning in the kiln, owing to the greater shrinkage of 30 the material of which the body-portion of the marker is composed, the engagement of shoulder *g'* of the cap or face by shoulder *A'* of said body-portion, will cause the cap or face, to be tightly drawn against the body-portion 35 as desired, and we would also remark that the flaring portion of hole *a* prevents too much of material *G* from entering said hole when said material is operated upon by the spreading-tool. We would also remark that we do 40 not desire to be understood as limiting our-

selves to the exact construction herein described. For instance, instead of having the body of the marker movable toward the spreading-tool in the formation of the face of cap of the marker, which we prefer, the marker 45 supporter is held stationary and the tool fed toward the marker.

What we claim is—

1. A rotary tool comprising a stock having a face provided with a suitable number of radially-arranged blades at suitable intervals 50 and one or more projecting cutters or blades between adjacent spreading-blades, the working side or face of the spreading-blades receding in the direction of rotation of the tool, 55 substantially as set forth.

2. A rotary tool, comprising a stock having a face provided with radially-arranged spreading-blades at suitable intervals with the working side or face of said blades receding in the 50 direction in which the tool rotates, and one or more projecting trimming-blades or cutters between adjacent spreading-blades and adjustable toward and from the center of the tool, substantially as and for the purpose set 65 forth.

3. A rotary tool comprising a stock having a face provided with radially-arranged spreading-blades and one or more projecting trimming-blades or cutters, substantially as and 70 for the purpose set forth.

In testimony whereof we sign this specification, in the presence of two witnesses, this 15th day of August, 1893.

MILTON B. MISHLER.
FRANK J. MISHLER.

Witnesses:
C. H. DORER,
WARD HOOVER.