

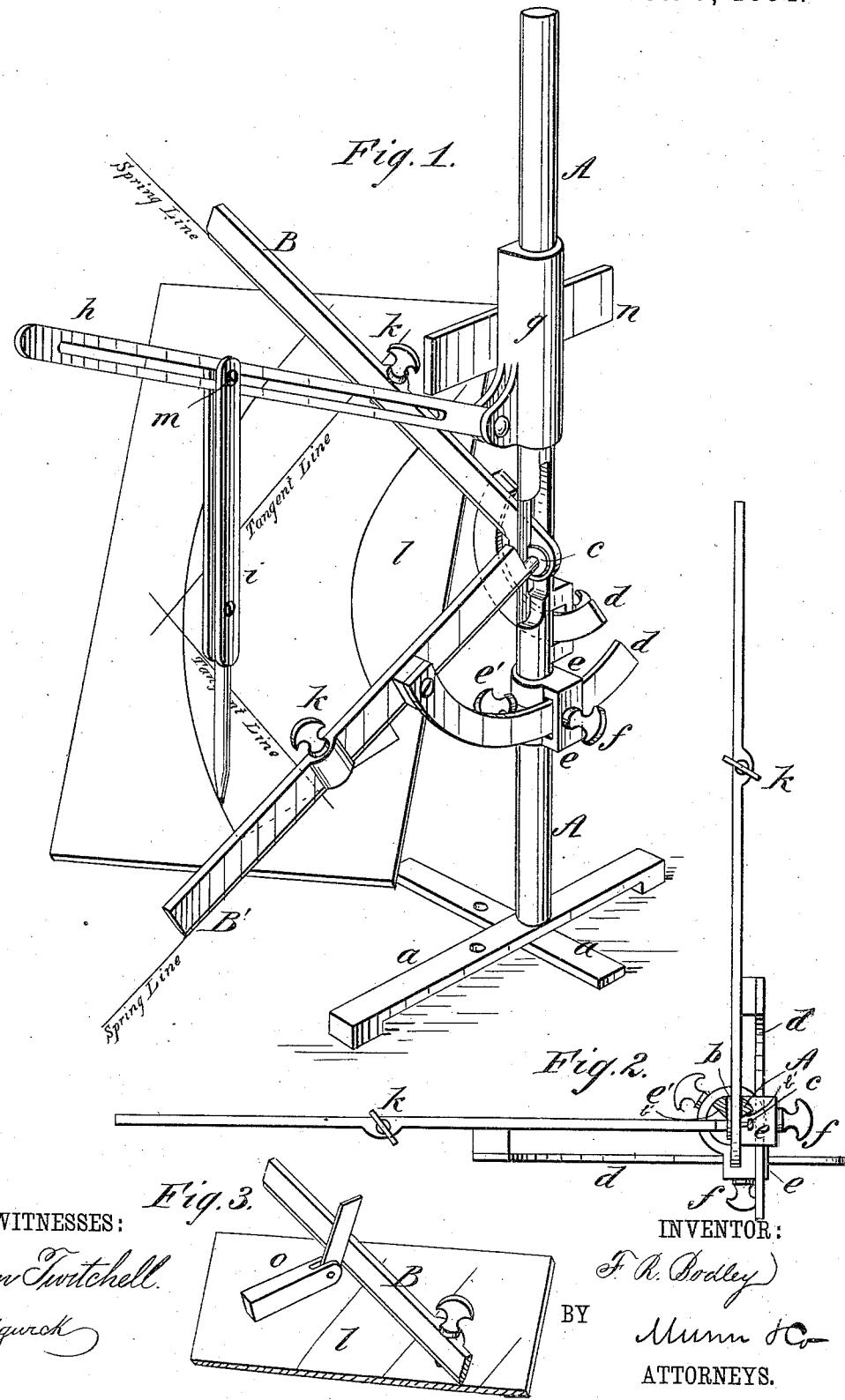
(Model.)

F. R. BODLEY.

APPARATUS FOR STRIKING MOLDS FOR HAND RAILS.

No. 306,215.

Patented Oct. 7, 1884.



WITNESSES:

Dom Twitchell.

G. Sedgwick

INVENTOR:

F. R. Bodley

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FREDERICK ROBERT BODLEY, OF DENVER, COLORADO.

APPARATUS FOR STRIKING MOLDS FOR HAND-RAILS.

SPECIFICATION forming part of Letters Patent No. 306,215, dated October 7, 1884.

Application filed May 28, 1884. (Model.)

To all whom it may concern:

Be it known that I, FREDERICK R. BODLEY, of Denver, county of Arapahoe, State of Colorado, have invented a new and Improved Apparatus for Striking Molds for Hand-Rails, of which the following is a full, clear, and exact description.

The object of my invention is to furnish an apparatus for use in producing molds for hand-rails of any required pitch, size, and shape, without requiring special skill for its operation; and to that end my invention consists in a mold-striker constructed as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the apparatus as applied to use. Fig. 2 is a horizontal section of the same, and Fig. 3 is a detail plan view showing the manner of obtaining the bevels.

A is a post, provided with legs *a a* for its support in an upright position. B B' are arms hung adjustably on the post, as follows: The inner end of arm B passes through a vertical slot, *b*, in the post, and its end has an aperture that receives a pin, *c*, on the end of arm B' loosely, so that the arm B is held to the post and may swing up and down. The post is bent away at the sides of slot *b*, as shown at *b'*, to allow a limited horizontal movement of arm B' relative to a sleeve, *e*, to be presently described, in addition to its up-and-down motion permitted by the connection *c*. The arms are provided with curved braces *d d*, passing through cleats *e e* on the post, that are provided with screws *f*, for clamping the braces and retaining the arms in position as adjusted. The arms are fitted with screws *k*, for holding the mold-board up to place, and the cleat *e*, receiving the brace of arm B', is free to turn on the post A with the arm, a screw, *e'*, being provided for clamping it.

Upon the upper end of post A is a block, *g*, to which is pivoted a slotted arm, *h*, carrying a tracer, *i*, that is held in the slot of arm *h* by a clamping-screw, *m*. The block *g* can be raised and lowered and also turned on the

post, and is fitted with a pivoted plate, *n*, for use as hereinafter specified. The tracer is provided with a pencil at its lower end.

In order to use the apparatus, the post A is set upright on the plan-board at the center of the curve of the ground plan, and with arm B directly above one spring-line. The arm B' is then to be turned to coincide with the other spring-line, arm B raised, and arm B' lowered to the proper pitch-line, and the arms clamped. The mold-board (shown at *l* in the drawings) is then attached to the under side of the arms B B' by the screws *k*, and thus attached the board *l* is held at the pitch required. The tracer *i* is then adjusted or swung out to mark the inner and outer lines of the curved mold according to the plan, each being marked in turn by turning the tracer *i* and block *g*. The arm *h*, carrying the tracer, swings on post A with block *g*, and the tracer thus moves in the arc of a circle over the board, the hinge of arm *h* allowing the tracer to rise to the inclination of the board, so that the pencil marks or inscribes the curved line. The bevels for the ends of the mold are next taken by placing a bevel, *o*, upon the board *l*, at right angles to the spring-line, and adjusting its blade to the arm B, as shown in Fig. 3, which will give a vertical line dropped from the spring-line, or the bevel for the ends. When the tangents are not square on the ground plan, the bevel must be placed at right angles to the tangent line and adjusted to the plate *n*, which is then turned out for that purpose. It will be seen that these operations are simple and easily learned, so that the most difficult mold can be struck out on the mold-board as easily as simple forms, and the subsequent work of cutting and shaping easily done.

As the mold-boards are usually heavy, it will be found more convenient to lay the board on a bench and screw the arms down upon it, instead of raising the board, as shown. The standard in that case will hang down in front of the board at an angle.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of parts forming a mold-striker, consisting of post A, horizontally and vertically adjustable arms B B', pivoted arm

h, and tracer *i*, substantially as described, for use as specified.

2. In a mold-striker, the arm *B*, arm *B'*, having pin *c*, cleats *e*, and braces *d*, combined with slotted post *A*, substantially as described.

3. In a mold-striker, the block *g*, slotted arm *h*, and tracer *i*, combined with the post *A*, substantially as described.

4. In a mold-striker, the combination, with the post *A* and the tracer, of the adjustable

arms *B* *B'*, provided with the screws *K* for holding a mold-board, substantially as set forth.

5. In a mold-striker, the pivoted plate *n*, combined with the block *g* and post *A*, as 15 and for the purpose specified.

FREDERICK ROBT. BODLEY.

Witnesses:

CHAS. H. KRAIG,

WILLIAM STEPHEN LAWTON.