

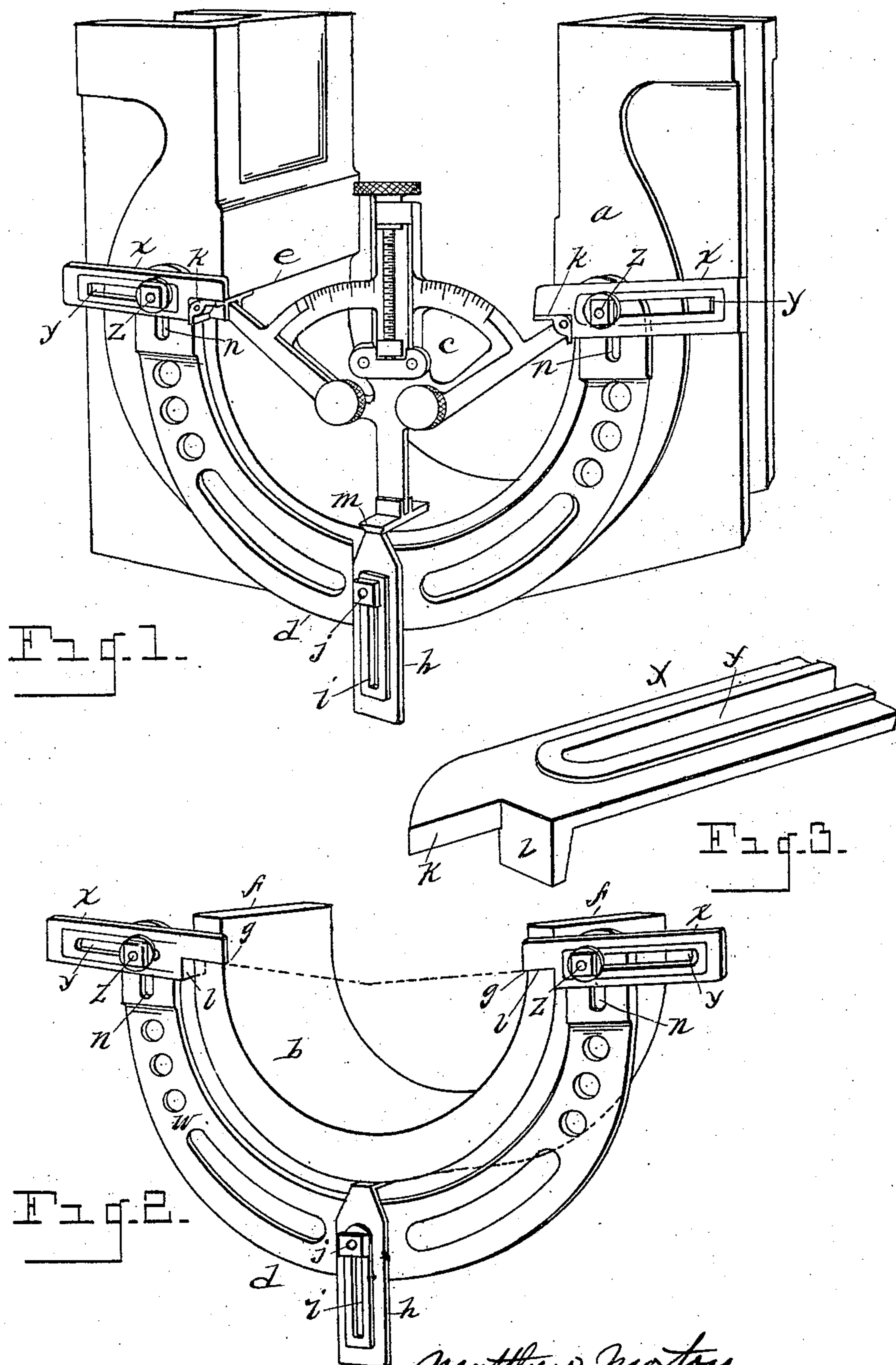
No. 848,193.

PATENTED MAR. 26, 1907.

M. MORTON & H. MANN.

SCRIBING DEVICE.

APPLICATION FILED DEC. 8, 1906.



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UNITED STATES PATENT OFFICE.

MATTHEW MORTON AND HORACE MANN, OF MUSKEGON HEIGHTS,
MICHIGAN.

SCRIBING DEVICE.

No. 848,193.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed December 8, 1906. Serial No. 346,934.

To all whom it may concern:

Be it known that we, MATTHEW MORTON and HORACE MANN, citizens of the United States, residing at Muskegon Heights, county of Muskegon, State of Michigan, have invented a certain new and useful Improvement in Scribing Devices, of which the following is a specification, reference being had to the accompanying drawings, which form a part of this specification.

Our invention has for its object certain new and useful improvements in a scribing mechanism or device, the same being designed to facilitate laying out the work upon shelves or brasses employed in locomotive driving-boxes, so that the work may be readily and accurately accomplished, a perfect fit of the shell in the corresponding box being assured.

Our present invention is shown and described in connection with a setting instrument in a pending application filed by us January 27, 1906, Serial No. 298,252; and it consists of the mechanism hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective, showing our present invention in connection with a setting instrument with which it is employed. Fig. 2 is a separate view in perspective of the arc-shaped frame constituting our present invention designed to be employed in connection with the setting instrument. Fig. 3 is a view in perspective, showing one of the adjustable arms of the frame.

The utility and adaptability of the mechanism embodied herein is fully set forth in said pending application and the method of its employment. For purposes of explanation we have shown herewith a locomotive driving-box *a*, into which a shell is to be driven, and *b* represents a shell to be scribed in readiness for the work to be further done thereupon to enable it to be properly fitted in the shell. In the accompanying drawings, also, we have shown for further purposes of illustration a setting instrument to be applied to the driving-box, the setting instrument being indicated at *c*. The setting instrument is fully described in said pending application and need not be further described herein, as it constitutes the subject-matter of said pending application.

Our present invention comprises an ad-

justable instrument, (indicated at *d*,) comprising an arc-shaped frame, as shown, said frame being designed to be adjusted by the setting instrument above referred to, the instrument *d* removable from the work and from the setting instrument when the work has been properly marked or scribed.

As is well known, the driving-boxes are arc-shaped on their inner peripheries, the curved inner surface of the box terminating at the inwardly-projecting shoulder, as indicated at *e*. It will also be understood that the longitudinal extremities of the shells (indicated at *f f*) are to be dressed down to snugly fit said shoulders of the box, it being customary to drive the shells into the corresponding box or to force them into the corresponding box under suitable pressure.

The work to be accomplished by our improved mechanism is to accurately scribe or mark the extremities of the shell, as indicated, for example, at *g*, so that the extremities of the shell may be dressed down to said mark to insure the snug fit of the shell in the driving-box. The setting instrument *c* in practical operation is first applied to the driving-box, as described in said pending application. Our adjustable instrument *d* comprises, as above observed, essentially an arc-shaped or circular frame (indicated at *w*) and is provided toward its extremities with adjustable arms *x x*, said arms being shown provided with elongated slots *y*, the arms being engaged upon the extremities of the frame in any suitable manner, as by means of screws *z* passed through the corresponding slot. The arc-shaped frame is also provided with a sliding arm intermediate its extremities, (indicated at *h*,) said arm being also constructed with an elongated slot, (indicated at *i*,) said arm being held in place upon the frame by a screw *j*. The arms *x x* are constructed with a shoulder *k* to be set on the line of the corresponding shoulder *e* of the box. The arms *x x* are each provided with an inwardly-projecting shoulder *l* to engage against the outer edge of the box. The slide *h* is brought into contact with the foot of the setting instrument, as at *m*, Fig. 1. When the arms of the instrument *d* have been set in position, the instrument *d* may be removed and applied to the shell, the arm *h* being located centrally against the outer periphery of the shell, as also the shoulders *l* and the arms *x x*, the

shoulder *k* projecting across the shell in position for scribing the required marks, as at *g*. We prefer to construct the instrument *d* with elongated slots toward its extremities, (indicated at *n*,) so that the corresponding arms *x x* may be adjusted lengthwise of the frame, as well as transversely thereupon. The operation of the device will thus be understood.

What we claim as our invention is—

10 1. An apparatus of the nature described comprising an arc-shaped frame having in combination therewith transversely-extended arms made adjustable laterally and longitudinally of the frame.

15 2. An apparatus of the nature described comprising an arc-shaped frame having in combination therewith transversely-extended arms made adjustable laterally and longitudinally of the frame, and an additional
20 transversely-adjustable arm located intermediate the extremities of the frame.

3. An apparatus of the nature described comprising an arc-shaped frame provided to-

ward its extremities with adjustable arms, and with an adjustable arm intermediate the 25 extremities of the frame, the arms at the extremities of said instrument each provided with a shoulder projecting inward at right angles therefrom and with a scribing-shoulder. 30

4. An apparatus of the nature described comprising an arc-shaped frame herein described having in combination therewith transversely-extended adjustable arms toward the extremities thereof, and an additional adjustable arm intermediate the 35 extremities thereof.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

MATTHEW MORTON.
HORACE MANN.

Witnesses:

J. W. PETTIBONE,
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