(Model.)

J. WADE.

STRIPING INSTRUMENT.

No. 342,484. Patented May 25, 1886.

Fig. 1.

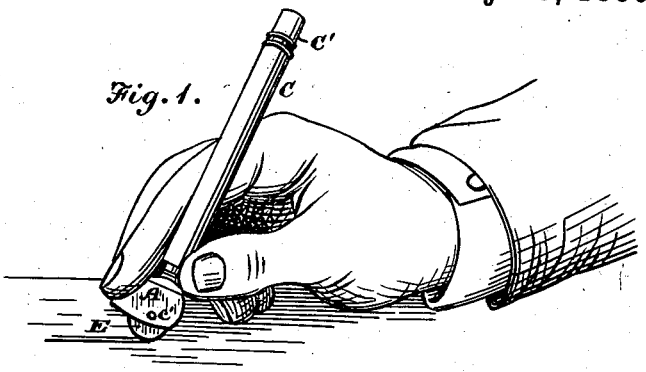

Fig. 2.

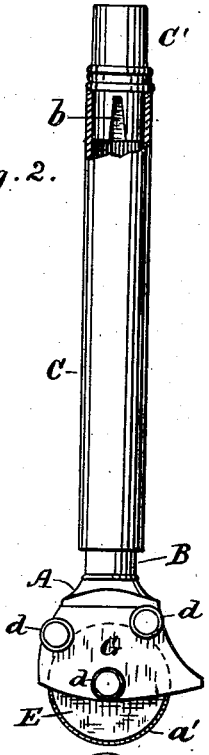

Fig. 3.

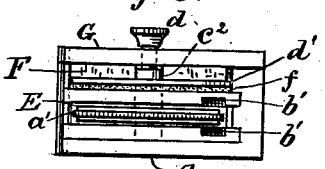

Fig. 4.

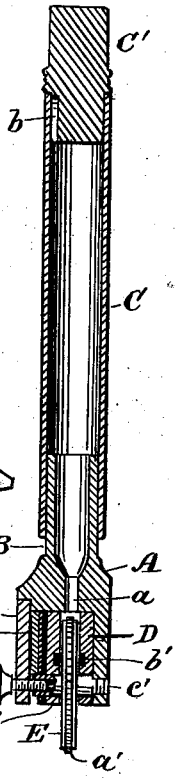

Fig. 5.

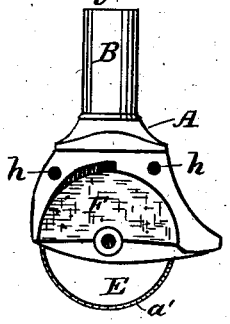

Fig. 6.

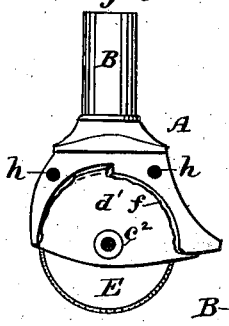

Fig. 7.

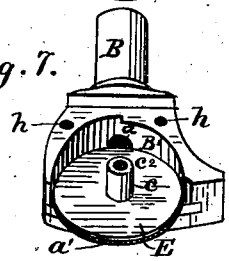

Fig. 8.

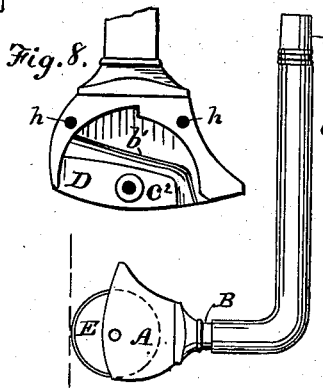

Fig. 9.

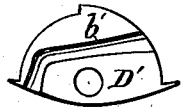

Fig. 10.

Witnesses:
Paul A. Knobloch.
G. B. Fowles.

Inventor:
James Wade
By W. Burris
Attorney.

UNITED STATES PATENT OFFICE.

JAMES WADE, OF DANA, INDIANA.

STRIPING-INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 342,484, dated May 25, 1886.

Application filed January 21, 1886. Serial No. 189,307. (Model.)

To all whom it may concern:

Be it known that I, JAMES WADE, a citizen of the United States of America, residing at Dana, in the county of Vermillion and State of Indiana, have invented certain new and useful Improvements in Painters' Devices for Striping Painted Surfaces, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to painters' striping devices, and it consists of a wheel mounted on a suitable bearing in a frame to revolve between friction-plates, which are held by a yielding pressure closely to the faces of the wheel, the frame being provided with a hollow stem, constructed to receive and hold firmly a hollow handle, adapted to receive and convey the paint through a connecting passage to the periphery of the revolving wheel provided with an annular bearing-tongue, all as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view showing the position of the striper in use in the painter's hand. Fig. 2 is a reverse side view of the frame, showing the compressor-plate and the set-screws. Fig. 3 is a bottom view of the tool. Fig. 4 is a longitudinal section on line *x x* of Figs. 2 and 3. Fig. 5 is a side view of the frame without the compressor-plate, showing the elastic packing in place. Fig. 6 is a side view without the compressor-plate and elastic packing, showing the adjustable friction-plate in position upon the wheel. Fig. 7 is a perspective view showing the position of the wheel in the frame. Fig. 8 is a side view showing the grooved face of the fixed friction-plate. Fig. 9 is a plan of the grooved face of the adjustable friction-plate detached. Fig. 10 is a side elevation of the tool provided with a curved handle.

A designates the frame, constructed of brass or any other suitable material. This frame is provided with a hollow stem, B, constructed any required length to fit within the lower end of a hollow handle, C, made of vulcanized rubber or any other suitable material. The cavity in the stem is connected with the wheel-cavity B′ of the frame by a passage, *a*, for conducting the paint to the periphery of the wheel. The hollow handle is made any required length, usually from four to eight inches, and its upper end is provided with a solid top, C′, the lower portion of which is made to fit closely in the upper end of the handle, and is provided with a slot, *b*, to admit air into the cavity of the handle during the use of the tool, to regulate and facilitate the flow of the paint to the wheel. This slot gradually increases in size from its top to its bottom, for the purpose of regulating the quantity of air to be admitted into the handle as may be required to be varied by the different sizes of wheels used, the quantities and conditions of the paint in the chambers of the stem and handle, it being evident that the farther the top is withdrawn out of the handle the more air will be admitted and the greater the flow of paint to the wheel, and vice versa.

D D′ designate, respectively, fixed and adjustable friction-plates, which are made of chilled steel and are constructed to fit closely within the cavity of the frame. The inner faces of these friction-plates are trued to form true bearings upon the faces of the striping-wheel, and these faces of the friction-plates are provided with grooves *b′*, opposite to each other and of the same size, for the purpose of taking up the paint from the wheel, as hereinafter explained.

E designates the striping-wheel, made of chilled steel with smooth trued faces. The wheel is provided with a central hole the required size to fit neatly and revolve freely on its bearing-pin *c*, made of steel or other suitable material. The end *c′* of the pin is threaded to fit in a threaded hole in the side plate of the frame, and the end *c²* of the pin is provided with a threaded socket to receive the threaded end of one of the set-screws *d*.

The adjustable friction-plate D′ is provided with a hole to receive the end *c²* of the pin *c*. A rubber packing, *f*, of the required thickness, is placed upon the outer face of the plate D′, and is secured in place by a plate, *d′*, of brass or other suitable material, riveted or screwed to the plate D′ over the rubber packing. The edges of this rubber packing are extended, as shown in the drawings, beyond the edges of the plates, so as to form close packing between the edges of the plates and the walls of the frame.

F designates an elastic packing, of cork or other suitable material, placed between the

compressor-plate G and the adjustable friction-plate, for the purpose of producing yielding pressure of the friction-plates upon the faces of the wheel. The compressor-plate is provided with holes to receive the set-screws, one of which has its bearing in the socket end c^2 of the pin c, as above described, and the other set-screws have their bearings in the threaded holes h in the frame. These set-screws are for the purpose of adjusting and holding in place the compressor-plate, so as to cause the faces of the friction-plates to press closely against the faces of the wheel, to prevent the paint from passing between the wheel and the plates. The set-screws and their threaded holes are made the requisite lengths to allow the plate D′ to be adjusted to the wheels, of all the different thicknesses, used with the frame.

The central portion of the periphery of the wheel is provided with an annular tongue, a', the bearing-surface of which is milled or corrugated to prevent the wheel from slipping over the surface being striped. This annular tongue is made the requisite size only to form a bearing for the wheel, leaving sufficient peripheral surfaces on each side of the tongue to receive and deposit on the surface most of the paint.

In using the tool the peripheral surfaces on each side of the tongue, coated with the paint conveyed to the wheel from the stem and handle, are held by the tongue from pressure upon the surface being striped, preventing thus the spreading of the paint and enabling the tool to produce stripes, the thickness of the wheel in use, having true smooth regular edges.

A number of wheels of the same diameter and construction, but of different thicknesses—say, from one-sixty-fourth to one-half of an inch—to correspond with the different widths of stripes to be painted, are constructed to accompany each tool.

To insert or remove a wheel, the set-screws, compressor-plate, and adjustable friction-plate are removed, allowing the wheels to be slipped off and on the bearing-pin c.

It is evident that this tool may be constructed to be used either in the left or right hand of a painter. The tool shown in the drawings is adapted to be used in the right hand, and is held in the position shown in Fig. 1 of the drawings.

In use the tool is moved toward, not from, the painter, and it may be used with a straight or smooth edged guide or without a guide, similar to the manner of using a painter's pencil or brush.

The set screws should be adjusted so as to cause sufficient pressure between the sides of the wheel and inner faces of the friction-plates to prevent the paint from passing between the wheel and plates. This pressure of the plates against the wheel tends to retard the free rotary movement of the wheel and requires pressure upon the tool by the hand of the painter sufficient to rotate the wheel. This pressure of the tool upon soft surfaces will press the bearing-tongue of the wheel into the surfaces far enough to allow the peripheral surfaces by the sides of the tongue to approach near enough to the surfaces which are being striped to press portions of the paint beyond and cause some of it to adhere to the sides of the wheel, and without the grooves in the plates the paint would accumulate and spread over the sides of that portion of the wheel which extends beyond the frame, which would require the painter to stop his work frequently for the purpose of cleaning the paint off the wheel.

In my improved tool the paint adhering to the sides of the wheel is carried upward through the mouths of the grooves and removed from the wheel and deposited in the interior portions of the grooves. The grooves being extended to the back edges of the plates and constructed so that when the tool is in position for use they incline backward and downward, the paint taken off the wheel and deposited in the grooves flows to and is again deposited upon the periphery of the wheel.

This tool is adapted for use upon curved surfaces as well as flat surfaces.

In using the tool upon vertical surfaces, a straight handle would be placed too nearly in a horizontal position to allow the paint to flow freely to the wheel, and therefore for such use the tool may be provided with a curved handle, as shown in Fig. 10 of the drawings, it being evident that the handle may be made straight or curved, as shown, or of any other required curvature without departing from the principle of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A painter's striping-wheel, E, provided with a central annular tongue, a', and having peripheral paint-carrying surfaces on each side of the tongue, in combination with a frame adapted to carry the wheel, and means for supplying the periphery of the revolving wheel with paint, substantially as and for the purposes described.

2. The combination of the frame A, provided with the hollow stem B, the cavity B′, and the connecting-passage a, and the wheel E, mounted upon a suitable bearing to revolve between friction-plates in the cavity of the frame, and means to supply the revolving wheel with paint, substantially as and for the purposes described.

3. The combination of the frame A, provided with the hollow stem B, cavity B′, and connecting-passage a, the grooved friction-plates D D′, the wheel E, mounted on the pin c, to revolve between the friction-plates in the cavity of the frame, the set-screws d, compressor-plate G, the elastic packing F, and means for supplying the revolving wheel with paint, substantially as and for the purposes described.

4. The combination of the frame A, having the hollow stem B, cavity B′, and connecting-passage a, the wheel E, mounted on a suitable

bearing to revolve between friction-plates in the cavity of the frame, the hollow handle C, constructed to fit closely over the upper portion of the stem, and the solid top C', having its lower portion constructed to fit closely in the upper end of the handle, and provided with a tapered slot, *b*, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES WADE.

Witnesses:
ISAAC BOGART,
JULIUS C. GROVES.