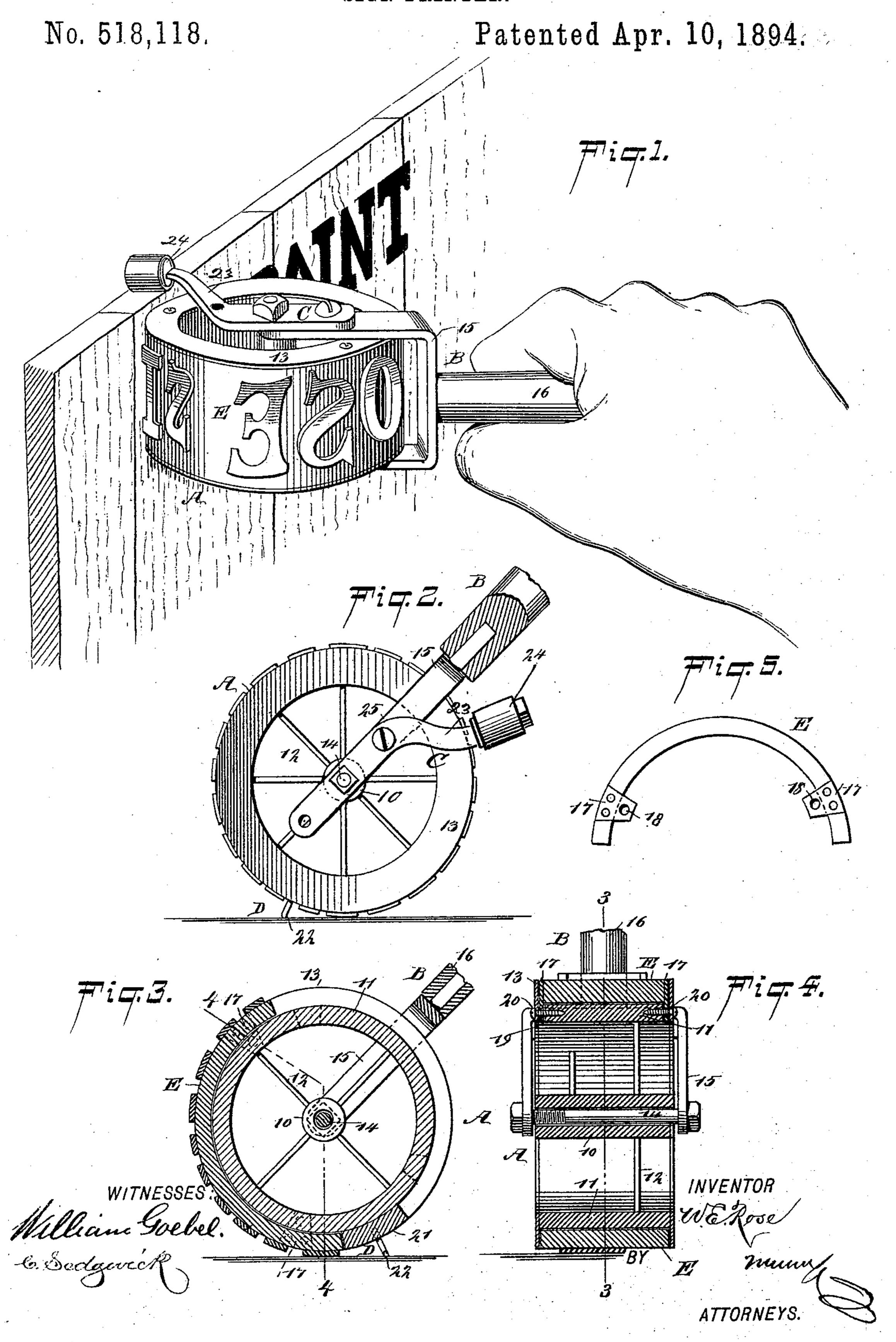
W. E. ROSE.
SIGN PRINTER.



United States Patent Office.

WILLIAM E. ROSE, OF NEW CARLISLE, INDIANA, ASSIGNOR OF ONE-HALF TO SCUYLER C. HICKS, OF SAME PLACE.

SIGN-PRINTER.

SPECIFICATION forming part of Letters Patent No. 518,118, dated April 10, 1894.

Application filed June 2, 1893. Serial No. 476,376. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. ROSE, of New Carlisle, in the county of St. Joseph and State of Indiana, have invented a new and 5 Improved Sign-Printer, of which the following is a full, clear, and exact description.

My invention has for its object to provide an improved device adapted for printing signs with paint upon fences, sidewalks, bridges, or. to any rough surface, either with or without previous preparation, also for printing expeditiously and clearly any desired matter upon boxes, show cards, or other articles.

Another feature of the invention consists 15 in providing a guide and rest for the device, when it is held in an upright position, to print

a sign upon a fence, for example.

The invention consists in the novel construction and combination of the several parts, as 20 will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of refer-25 ence indicate corresponding parts in all the views.

Figure 1 is a perspective view of the device, illustrating it as applied to a fence and as producing a sign thereon. Fig. 2 is a side 30 elevation of the device, the handle being partly in section. Fig. 3 is a central section taken circumferentially through the device, one of the printing blocks having been removed, said section being taken practically 35 on the line 3-3 of Fig. 4. Fig. 4 is a diametrical section, taken practically on the line 4-4 of Fig. 3; and Fig. 5 is a side elevation of one of the printing blocks removed from the device.

In carrying out the invention, the device consists practically of a wheel A, adapted to carry type, a handle B in which the wheel is pivoted, an adjustable guide device C, and a stop device D. The wheel usually comprises 45 a hub 10, a rim 11, which is practically of equal width with the length of the hub, and spokes 12, connecting the hub and the rim, the rim being provided at each side with a continuous flange 13, extending beyond its periphery, 50 thereby forming a bed, adapted to receive segmental printing blocks E. I desire it, how-

ever, to be distinctly understood that instead of constructing the wheel with a hub and spokes, the wheel may be made solid if in

practice it is found desirable.

The spindle 14 is passed loosely through the hub or central portion of the wheel; and the ends of the members of a yoke 15, are loosely mounted upon the extremities of the spindle, the said yoke members extending one at each 60 side of the wheel yet out of engagement with its side faces, while the bow portion of the yoke is removed some distance from the periphery of the wheel. A handle 16 of any approved construction is secured to the yoke; 65 in fact, the yoke and the handle may be made integral if in practice it is found advantageous.

As heretofore stated, the wheel is adapted to carry printing blocks E. These blocks are 70 of segmental shape, and any desired number of them may be employed to cover or practically cover the rim of the wheel, thereby surrounding the rim. Many ways may be devised for fastening the segmental printing 75 blocks in position upon the wheel, but preferably each block is provided at each side at or near each end with an embedded plate 17, as shown in Figs. 4 and 5, and these plates extend beyond the inner faces of the blocks 80 and their inner projecting portions are pro-

vided with apertures 18.

Openings or recesses 19, are produced in the periphery or bed of the wheel adjacent to its flanges, as shown in Fig. 4; and when the 85 printing blocks are placed in engagement with the periphery of the wheel the tie plates 17 extend downward into the openings or recesses 19 in the bed or periphery of the wheel, as is likewise best shown in Fig. 4, and screws 90 20, are passed through suitable openings made in the outer faces of the flanges of the wheel, and through the openings 18 in the tie plates into the side portions of the bed or periphery of the wheel, as is likewise shown in Fig. 4. 95 In this manner the type blocks are firmly held in position upon the wheel, yet they may be readily removed and replaced by others by simply removing the screws 20. The type blocks are placed end to end, but they do not roc cover the entire peripheral surface of the wheel, as a space is left for a plain block 21,

shown best in Fig. 3. This block is provided with a stop 22, which extends outwardly from it. The stop is preferably of staple-like shape, and is intended to determine the start-5 ing and stopping point of the device. In starting, the stop is made to engage with the surface to be printed upon back of the commencement of the matter contained upon the type blocks, and when the wheel has made a so complete revolution the stop will be in advance of the end letter of the type matter, and will therefore determine the time when the device is to be removed from the surface. The first position of the stop is shown in Fig. 15 3, and the second position in Fig. 2. I desire it, however, to be understood that the shape of the stop may be different from that illustrated and described.

The type may be produced upon the blocks

20 in any suitable or approved manner.

In order to provide a guide, and practically a support for the device when it is used to print a horizontal line of reading matter upon a fence or other object, an arm 23, is remov-25 ablyattached to one member of the yoke section of the handle. This arm at one end is curved in such manner that it will extend over the outer side of one of the flanges of the wheel and beyond the outer edge of said flange; and 30 the outer extremity of the arm is made cylindrical and is provided with a friction roller 24, mounted to turn loosely thereon. The arm at its roller end is bent or curved at an angle to the body portion, which is provided 35 with three aligned apertures, or perforations, located equidistantly. The spindle of the wheel, A, passes through the middle aperture, and is the center on which the arm, 23, is reversed or turned from one to the other of its 40 two positions, which are illustrated in Figs. 1 and 2. A screw, 25, is inserted through either of the two outer apertures and a coincident one in the yoke, according as the arm, 23, is required to be secured in one position or the 45 other.

When the device is used for printing diagonally, vertically, or upon a sidewalk, or an object resting in a horizontal position, the guide arm 23, is adjusted as shown in Fig. 2, and is secured in that position, thus carrying

the friction roller 24 out of the way of the printing surface of the device. When, however, the device is to be used for printing a line of type near the top of a wall, fence, or other object, the roller rests upon the top of 55 the fence or wall, as shown in Fig. 1, and as the wheel is rolled along the surface to be printed the roller will serve as a guide for the device, while the arm and roller combined will act as a support, removing the greater 60 portion of the weight of the device from the hand and arm of the operator.

This device is exceedingly simple, and as stated it may be employed for printing upon any desired object or article. Primarily it 65 is adapted for outdoor printing, such as advertising signs, &c., and to print with paint, the type surface of the wheel being rolled over the surface to which the moist paint has been applied, prior to applying the wheel to 70

the surface to be printed.

It will be understood that the device may be constructed of any suitable or approved material; wood and metal, however, are employed wherever they may be advantageously 75 used.

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

1. In a sign printer, or like device, the combination, with the type wheel, of an arm extending from one of the wheel bearings beyond the periphery thereof, and a roller journaled on the outer end of said arm, and arranged with its axis parallel to the plane of 85 the side of said wheel, as shown and described, to operate as specified.

2. In a sign printer or like device, the combination with the type wheel and yoke or handle thereof, of the reversible roller-carrying 90 arm, 23, having three equidistant apertures and journaled on the spindle of said wheel, and a screw adapted to pass through either of the two outer apertures and through the yoke, as shown and described, for the purpose speci- 95 fied.

WILLIAM E. ROSE.

Witnesses:

T. J. GARRATTE, S. C. LANCASTER.