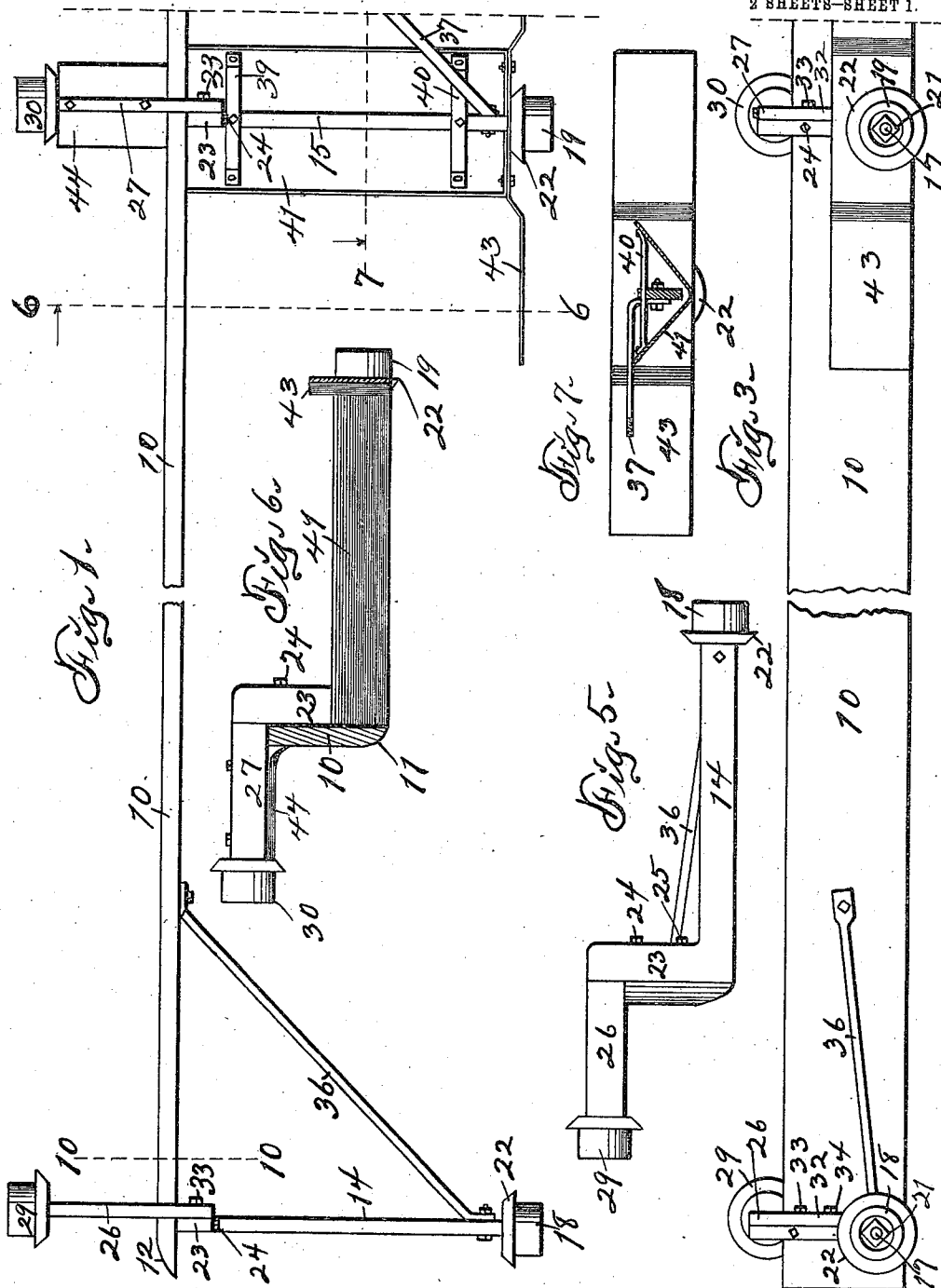


A. HORRABIN.
 COMBINED CURB AND GUTTER FINISHER.
 APPLICATION FILED AUG. 2, 1910.

987,879.

Patented Mar. 28, 1911.

2 SHEETS—SHEET 1.



Attest:
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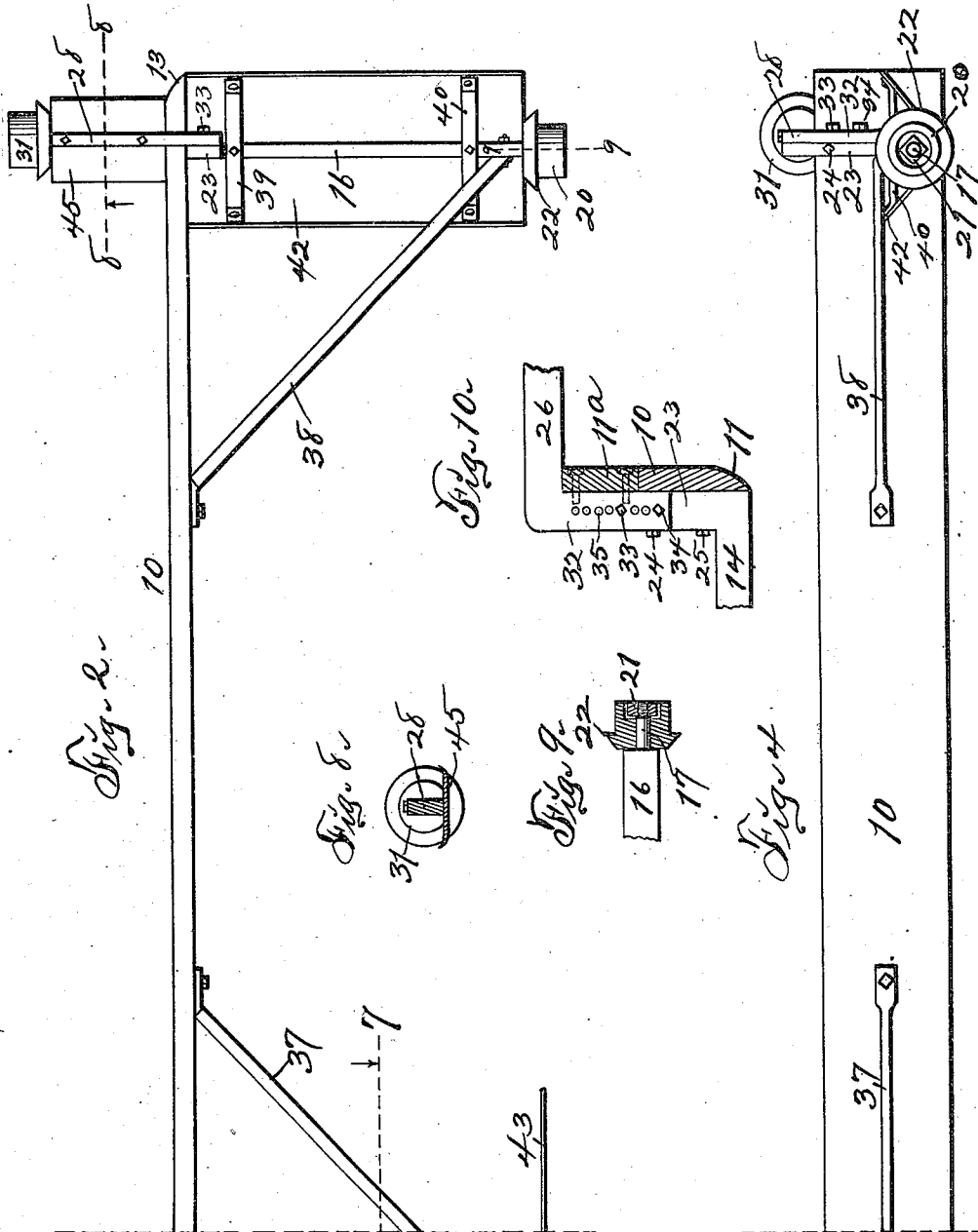
Inventor:
 Alfred Horrabin
 By J. E. Horner

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UNITED STATES PATENT OFFICE.

ALFRED HORRABIN, OF IOWA CITY, IOWA.

COMBINED CURB AND GUTTER FINISHER.

987,879.

Specification of Letters Patent. Patented Mar. 28, 1911.

Application filed August 2, 1910. Serial No. 575,580.

To all whom it may concern:

Be it known that I, ALFRED HORRABIN, a citizen of the United States of America, and resident of Iowa City, Johnson county, Iowa, have invented a new and useful Combined Curb and Gutter Finisher, of which the following is a specification.

The object of this invention is to provide improved means for finishing a combined street curb and gutter when said curb and gutter are built up of plastic material such as cement composition.

A further object of this invention is to provide improved means for adjusting the finishing tool to suit varying heights of curb face.

A further object of this invention is to provide in a single tool a plurality of separated finishing faces and a steadying means auxiliary to and spaced from both of said finishing faces.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a plan of a portion of the tool. Fig. 2 is a plan of the remaining portion of the tool and should be read in connection with Fig. 1. Fig. 3 is an elevation of a portion of the tool and Fig. 4 is an elevation of the remainder of the tool and should be read in connection with Fig. 3. Fig. 5 is an elevation of the forward end portion of the tool. Fig. 6 is a cross-section on the indicated line 6—6 of Fig. 1. Fig. 7 is a longitudinal section on the indicated line 7—7 of Figs. 1 and 2. Fig. 8 is a section on the indicated line 8—8 of Fig. 2. Fig. 9 is a section on the indicated line 9—9 of Fig. 2. Fig. 10 is a section on the indicated line 10—10 of Fig. 1 and also shows means for adjusting the height of a tool to a different height of curb face.

In the construction of the tool as shown the numeral 10 designates a face plate, preferably formed of metal, straight from end to end, and of uniform width and thickness from end to end. One lower edge 11 of the face plate 10 is rounded and the opposite end edges 12, 13 are rounded. The rounded edge 11 is adapted to form and shape the jointure of the curb and gutter faces and

the end edges 12, 13 are rounded to ride over and compress material to form the curb face. Axle members 14, 15, 16 are provided. These axle members are alike in construction and comprise horizontal portions of a length to compass and extend across the width of the gutter and terminate in pivots 17 (Fig. 9) adapted to carry flanged wheels 18, 19, 20. The wheels 18, 19, 20 are recessed in their outer ends (Fig. 9) to receive nuts 21 (Figs. 3 and 4) whereby the wheels are secured to the pivots 17. The wheels 18, 19, 20 are adapted to ride on a form board (not shown) employed temporarily to determine one side margin of the gutter and flanges 22 on said wheels overlap below the upper margins of the form boards and guide the wheels in their travel. The flanges 22 are beveled on one side and are adapted to roll down and depress the gutter material adjacent to the form boards. The axle members 14, 15, 16 are formed with upstanding portions 23 which cross the face plate 10 and are secured thereto by cap screws 24, 25 extending through said upstanding portions and seated in said face plate.

Axle members 26, 27, 28 are provided and each is constructed with a horizontal portion adapted to compass and extend across the face plate 10 and the width of the curb. The horizontal portions of the axle members 26, 27, 28 terminate in pivots, identical with those previously described, and are provided with flanged wheels 29, 30, 31 adapted to ride on the form boards (not shown) employed temporarily to determine the outer face of the curb, the flanges of said wheels overlapping downward from the upper margin of the boards and beveled to depress the outer edge of said curb. The axle members 26, 27, 28 are formed with downturned portions 32 overlapping and contacting with the upstanding portions 23 of the axle members 14, 15, 16. The downturned portions 32 are adjustably connected to the upstanding portions 23 by screws 33, 34 extending through some of holes 35 in the downturned portions and seated in screw seats (not shown) in the upstanding portions. Thus the downturned portions may be adjusted relatively to the upstanding portions to correspond with the desired height of the inner face of the curb and (as shown in Fig. 10)

the effective width of the face plate may be increased by supplying an auxiliary face plate or face plates 11^a. The auxiliary face plate or plates preferably are made of wood
5 and are supplied as needed in making curbs of more than ordinary height.

The axle members 14, 15, 16 are secured and braced at their outer ends to the face plate 10 by braces 36, 37, 38. Struts 39, 40
10 are fixed to and extend transversely of the horizontal portions of the axle members 15, 16 and trowels 41, 42 are fixed to ends of said struts. The trowels 41, 42 preferably are angular in cross-section and are rounded
15 at the angle. The trowels 41, 42 are arranged with the lowermost points of their rounded central portions flush with the lower margin of the face plate 10 and extending at right angles thereto. A gathering
20 plate 43 is mounted on and extends in front and to the rear of the outer end portion of the trowel 41 and end portions of said gathering plate are offset into a common plane parallel with the face plate 10
25 and in alinement with the engaging faces of the flanges 22. Trowels 44, 45 are fixed to and carried by the horizontal portions of the axle members 27, 28 between the face plate 10 and the wheels 30, 31.

30 It is the function of the trowels 41, 42 to press down, straighten, plane and smooth the upper surface of the gutter being formed. It is the function of the gathering plate 43 to gather the material to be com-
35 pressed in front of the trowel 41 and to bear against a form board and aid the flanged wheels 18, 19, 20 in guiding the tool. It is the function of the trowels 44, 45 to compress, straighten, smooth and plane
40 the upper surface of the curb. It is the function of the axle members 14, 26 and devices carried thereby to steady and support the face plate 10 at one end and maintain the parallel arrangement of said face plate
45 relative to the form boards.

I claim as my invention—

1. A combined curb and gutter finisher, comprising a longitudinal face plate, trowels on opposite sides of and rigidly connected
50 to and arranged transversely of said face plate, and supporting and guiding wheels at opposite ends of said trowels.

2. A combined curb and gutter finisher, comprising a longitudinal metal face plate, trowels on opposite sides of and rigidly connected to said face plate, and supporting
55 and guiding wheels at opposite ends of said trowels and on opposite sides of said face plate.

60 3. A combined curb and gutter finisher, comprising a longitudinal metal face plate formed with one of its bottom edges rounded and two of its end edges rounded, trowels on opposite sides of and rigidly connected to
65 and arranged transversely of said face plate,

and supporting and guiding wheels at opposite ends of said trowels and on opposite sides of said face plate.

4. A combined curb and gutter finisher, comprising a longitudinal face plate, trowels on opposite sides of and rigidly and
70 transversely connected to said face plate, supporting and guiding wheels at opposite ends of said trowels, and a steadying axle secured to said face plate and provided with
75 supporting and guiding wheels.

5. A combined curb and gutter finisher, comprising a longitudinal face plate, axle members braced to said face plate, supporting
80 and guiding wheels on extremities of said axle members, trowels on some of said axle members, a gathering plate on one of said axle members, supplemental axle members secured to the first axle members and provided with supporting and guiding wheels,
85 and trowels on some of said supplemental axle members, said trowels arranged transversely of said face plate.

6. A combined curb and gutter finisher, comprising a longitudinal face plate, axle
90 members braced to said face plate, supporting and guiding wheels on extremities of said axle members, trowels on some of said axle members, a gathering plate on one of said axle members, supplemental axle mem-
95 bers adjustably secured to the first axle members and provided with supporting and guiding wheels, and trowels on some of said supplemental axle members, said trowels arranged transversely of said face plate.
100

7. A combined curb and gutter finisher, comprising a longitudinal face plate, two-
105 plane axles arranged transversely of said face plate, wheels on the extremities of said axles, said wheels in different planes on opposite sides of the face plate, trowels on some of said axles, and means for bracing
said axles to said face plate.

8. A combined curb and gutter finisher, comprising a longitudinal face plate, axle
110 members braced to said face plate, supporting and guiding wheels on extremities of said axle members, trowels on some of said axle members, supplemental axle members secured to the first axle members and provided with supporting and guiding wheels,
115 and trowels on some of said supplemental axle members.

9. A combined curb and gutter finisher, comprising a longitudinal face plate, two-
120 plane axles arranged transversely of said face plate, wheels on the extremities of said axles, said wheels in different planes on opposite sides of the face plate, means for adjusting members of the axles relative to each
125 other, trowels on some of said axles, and means for bracing said axles to said face plate.

10. A combined curb and gutter finisher, comprising a longitudinal face plate ad-
130

justable as to width, adjustable two-plane
axles transversely of and secured to said
face plate, supporting and guiding wheels
on the axles, and trowels on some of said
5 axles, the trowels on one side of the face
plate being in a different plane from the
trowels on the opposite side of said plate.

Signed at Grinnell, Iowa, this sixteenth
day of May, 1910.

ALFRED HORRABIN.

Witnesses:

J. F. WILSON,
F. P. MARVIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
