

(No Model.)

3 Sheets—Sheet 1.

T. E. MURRAY.

POCKET OR BIN FOR THE STORAGE OF COAL, GRAIN, &c.

No. 503,097.

Patented Aug. 8, 1893.

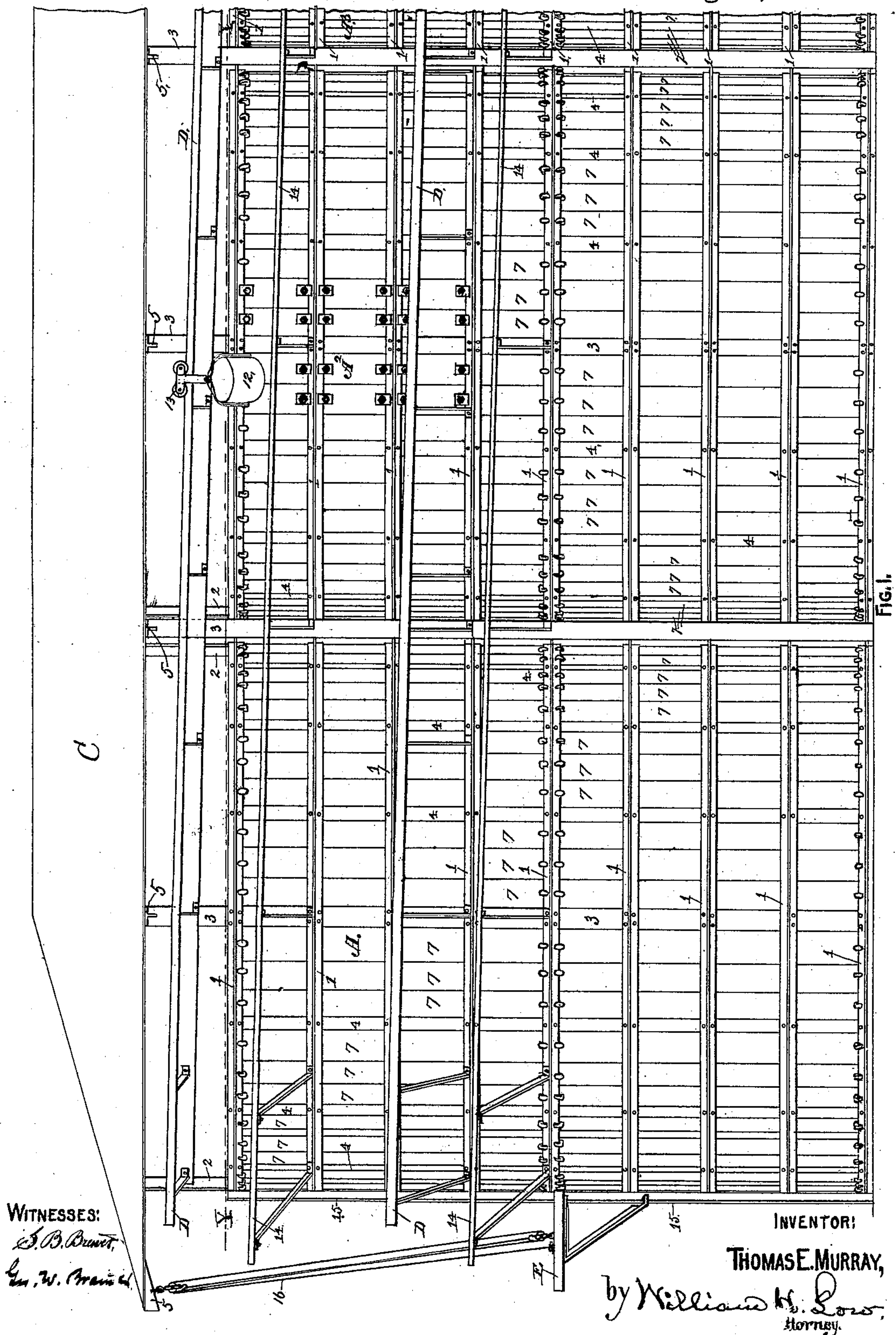


FIG. 1.

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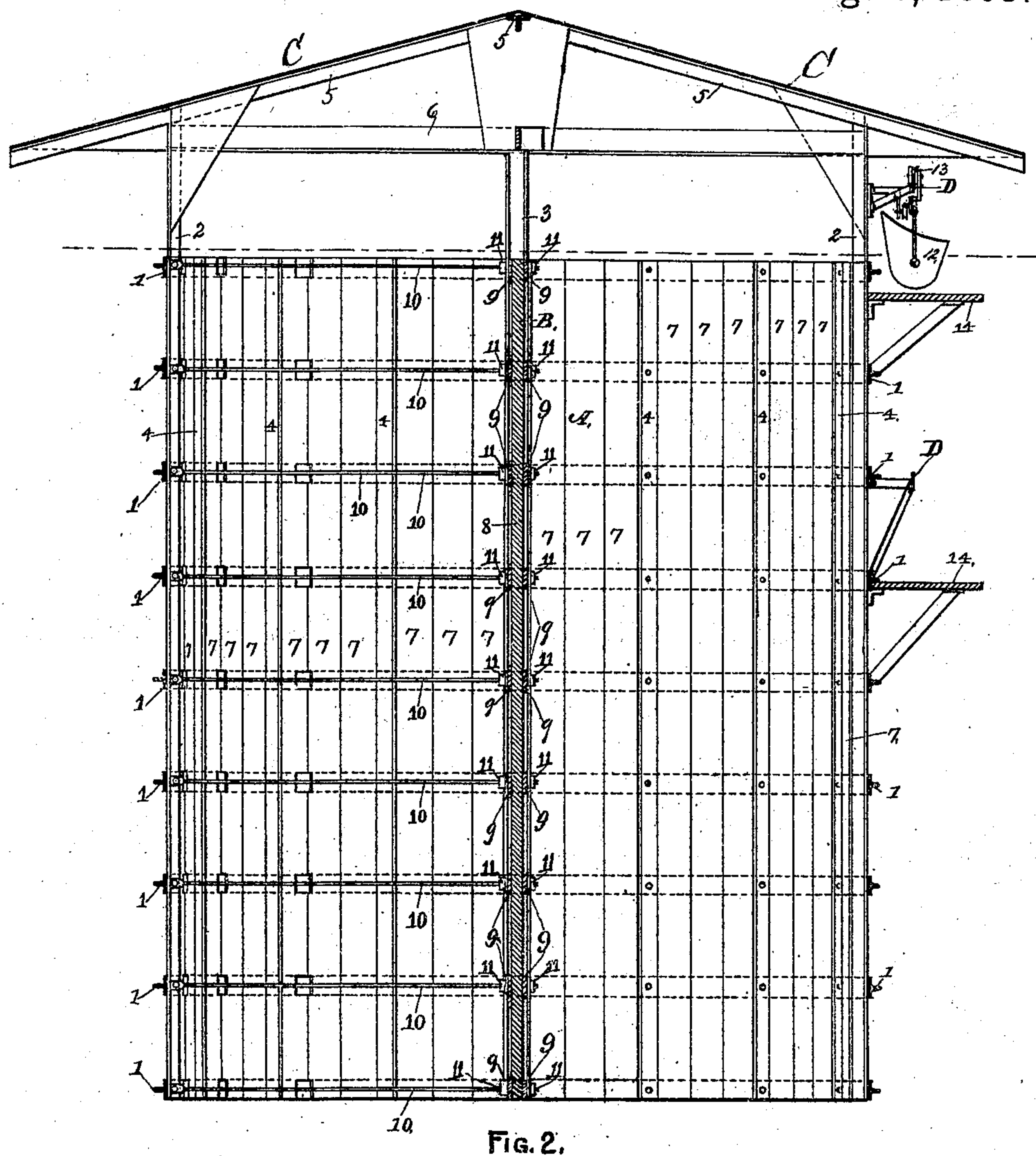
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WITNESSES:

S. B. Brewer,

Geo. W. Mainland

INVENTOR:

THOMAS E. MURRAY,

by

William H. Low,

Attorney.

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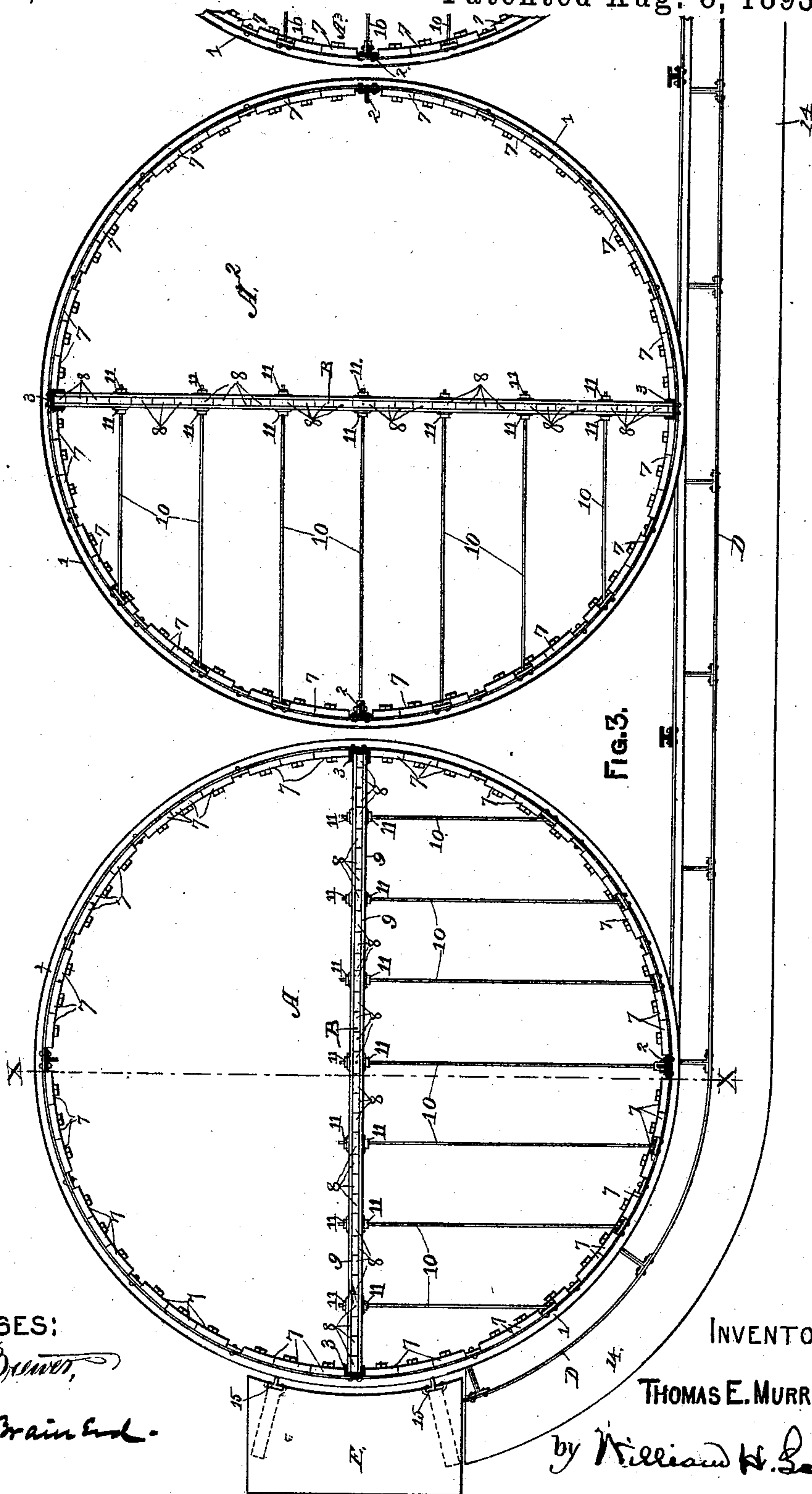
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WITNESSES:

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Geo. W. Brainard.

INVENTOR:

THOMAS E. MURRAY,

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Attorney.

UNITED STATES PATENT OFFICE.

THOMAS E. MURRAY, OF ALBANY, NEW YORK, ASSIGNOR OF ONE-HALF TO
WILLIAM McEWAN, OF SAME PLACE.

POCKET OR BIN FOR THE STORAGE OF COAL, GRAIN, &c.

SPECIFICATION forming part of Letters Patent No. 503,097, dated August 8, 1893.

Application filed December 7, 1892. Serial No. 454,367. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. MURRAY, of the city and county of Albany, in the State of New York, have invented new and useful
5 Improvements in the Construction of Pockets or Bins for the Storage of Coal, Grain, and other Commodities, of which the following is a specification.

My invention relates to improvements on
10 an invention for which an application for Letters Patent (Serial No. 449,974) was filed on the 25th day of October, 1892; and the object of my present invention is to render my former one more efficient and enlarged in its usefulness.
15 This object I attain by the means illustrated in the accompanying drawings, which are herein referred to and form part of this specification.

In said drawings, Figure 1 is a side elevation of a portion of a series of my bins, showing the tracks and scaffolds used for facilitating the filling of said bins. Fig. 2 is a vertical section of Fig. 3 at the line X X; and Fig. 3 is a horizontal section of Fig. 1 at the line Y Y.

25 In my former invention, hereinbefore referred to, a single bin only was designed to be used, but experience teaches that where a large quantity of coal is to be stored, or when large quantities of coal of different sizes are to
30 be stored, a single bin is insufficient, and I have made this improvement for the purpose of remedying the defects of said earlier invention.

As represented in the drawings, A, A², and
35 A³ designate several bins which are arranged in a continuous line to form a series, but said series may be continued as far as may be required to meet the requirements of each case; preferably said bins are made about fifty feet
40 in diameter and about fifty feet in height, but these proportions may be varied as occasion may require. Said bins are constructed in a cylindrical form with their central axes in a vertical position, and they consist of a
45 metallic-frame composed of a series of hoops, 1, posts, 2 and 3, ribbons, 4, rafters, 5, and tie-bars, 6; said hoops, rafters, and posts 2 are preferably made of T-iron, and the posts 3 of channel-bars. The ribbons 4 are preferably
50 made of flat bars and—like the posts 2 and

3—they are secured to the hoops 1—by rivets or other means—so as to space said hoops at equal distances from each other; said ribbons are arranged to break the spaces between the posts into panels of a nearly uniform size, 55 and said panels are filled in by staves, 7, of wood or other suitable material, said staves being secured to the hoops 1 by means of bolts or other fastenings.

B designates a partition which divides each
60 bin diametrically into two equal compartments. The opposite edges of said partition engage in the channels of the posts 3, and each partition is composed of a series of planks, 8, fixed in a vertical position, and
65 having a series of metallic bars or plates, 9, running from one edge to the opposite one; a series of braces, 10, or stays extend from each of said bars to the corresponding hoop 1 so as to retain said partition in position against
70 the pressure of the contents of either of the compartments of the bin; each of said braces has one end secured to a corresponding hoop 1 or to one of the posts 2; the opposite end of each of said braces will pass through a bar 9
75 which is arranged in a position to correspond to the height of the brace, and each brace is provided with binding-nuts, 11, which take against the opposite sides of said partition and afford the means for adjusting the length
80 of said braces to afford the best support to the partition B.

C designates a roof secured to the rafters 6, and each bin may be provided with a separate roof, or, as shown in the drawings, a single roof may be made to cover all the bins. 85

D designates the tracks on which coal-buckets, 12, are moved for the purpose of filling the bins; said buckets are arranged to be attached to a truck, 13, which is fitted to run
90 on said tracks; the latter are preferably arranged upon a plane having a slight downward inclination from the loading-scaffold E to the opposite end of the series of bins, so that a loaded bucket can be easily moved on
95 the tracks with a slight expenditure of power. Beneath each of said tracks a scaffold, 14, is arranged within easy reach of the coal-buckets 12, so that an operative standing on said scaffold can effect the dumping of the coal from 100

said buckets into the bins, and also aid in returning the buckets to the starting-point near the loading-scaffold E.

E designates a loading-scaffold or platform 5 which is arranged adjacently to the apparatus used for hoisting the coal to a required height. Preferably said loading-scaffold is fitted to slide on vertical guides, 15, which are secured to the exterior of the bin A, so that said loading-scaffold can be adjusted to a required 10 height. As a means for adjusting said loading-scaffold, a block-and-fall, 16, is employed. One of said blocks is attached to an overlying rafter, 5, and the other block, is attached 15 to said loading-scaffold, but when preferred any suitable means for raising and lowering said scaffold may be employed.

As shown in the drawings, the bin A has its partition B arranged in a line with the 20 central longitudinal line of the series of bins, so that when coal is emptied into said bin it can be run into either compartment of said bin, but in the other bins of the series the said partition is arranged transversely to said 25 center line, so as to render either compartment of said bins accessible for emptying the coal thereinto from the scaffold 14.

The means employed to facilitate the discharge of coal from said bins will be found

fully described in the specification which accompanies my former application hereinbefore referred to.

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

1. The combination of a series of cylindrical bins arranged in a continuous line, a loading-scaffold, a continuous scaffold running along one side of the series of bins, and a track arranged above said scaffold and running in a corresponding direction to the latter, as and 40 for the purpose herein specified.

2. A cylindrical pocket or bin divided into two equal compartments by means of a diametrically-arranged partition which practically extends to the top of said bin and is 45 stayed by means of metallic braces which connect with one side of said bin and to said partition, and a roof arranged over the top of said bin to leave a clear space between the top of the bin and the roof to allow the dumping of coal or other material into said compartments; the upper end of the latter being 50 open to the atmosphere, as and for the purpose herein specified.

THOMAS E. MURRAY.

Witnesses:

WM. H. LOW,
S. B. BREWER.