A. J. MEIER.

WHITE LEAD STACK.

APPLICATION FILED DEC. 27, 1910.

996,041.

Patented June 20, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

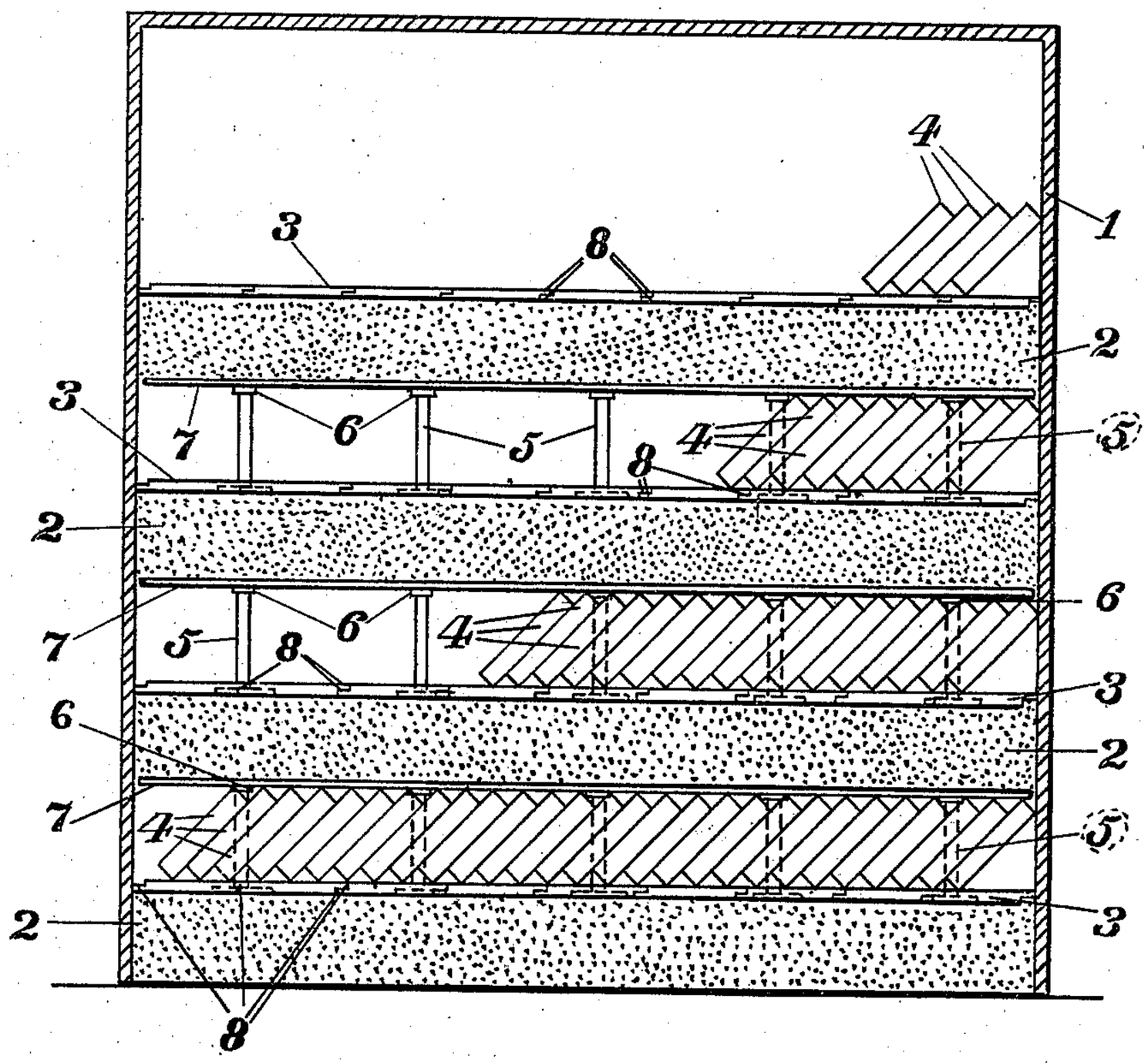
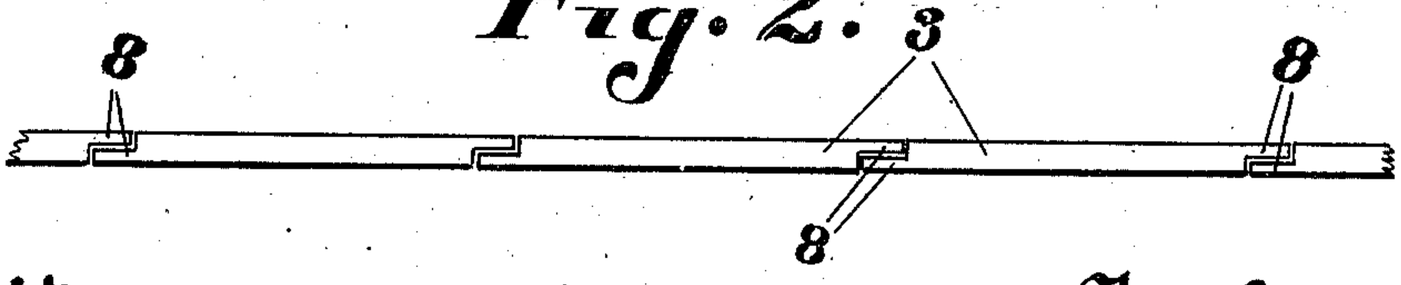


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

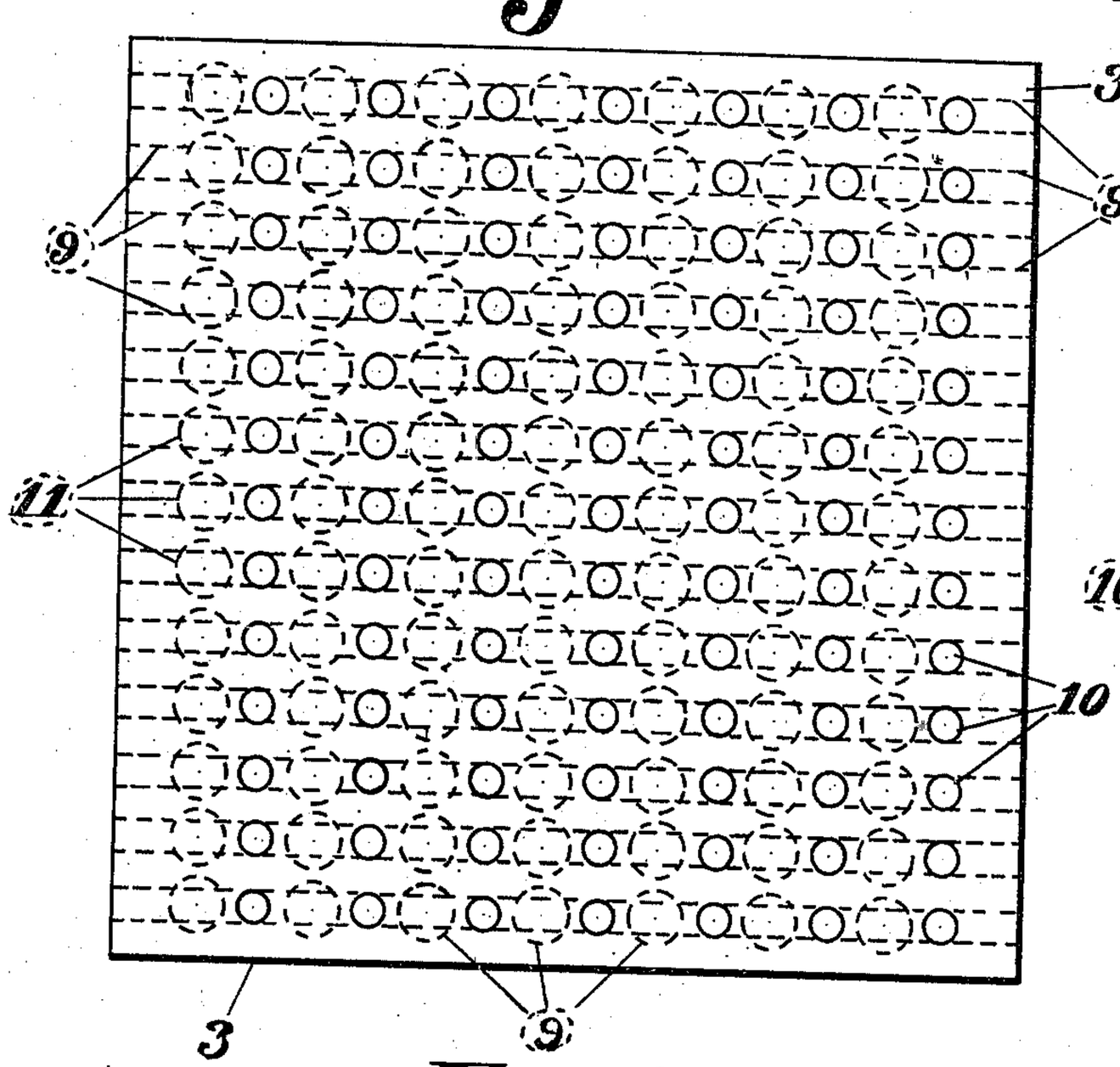

Fig. 4.

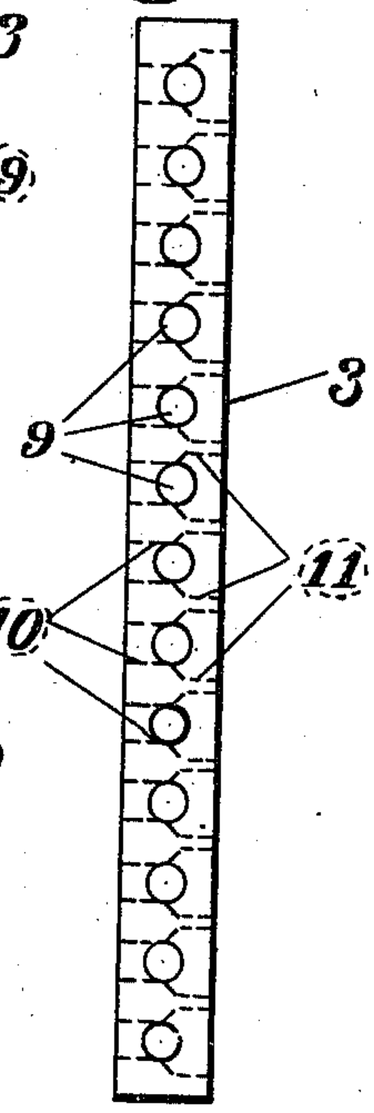

Fig. 5.

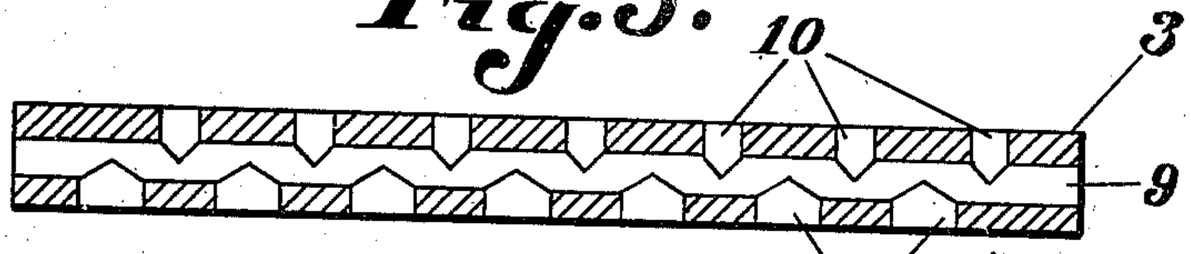

Fig. 6.

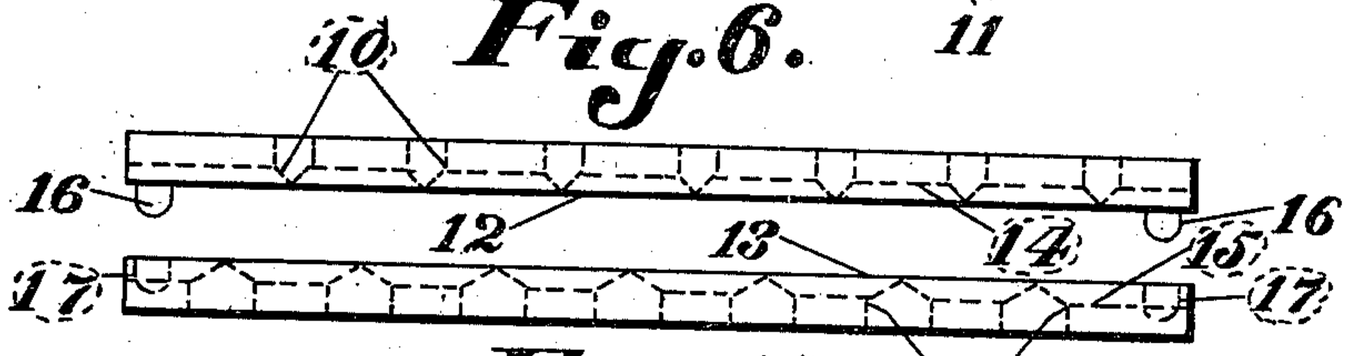

Fig. 7.

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UNITED STATES PATENT OFFICE.

ALBERT J. MEIER, OF GLENDALE, MISSOURI.

WHITE-LEAD STACK.

996,041. Specification of Letters Patent. Patented June 20, 1911.

Original application filed January 22, 1909, Serial No. 473,631. Divided and this application filed December 27, 1910. Serial No. 599,378.

To all whom it may concern:

Be it known that I, ALBERT J. MEIER, a citizen of the United States, residing at Glendale, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in White-Lead Stacks, of which the following is a specification.

This application is a division and continuation of one filed by me January 22, 1909, Serial No. 473,631.

This invention relates to the conversion of combined corroding pots and buckles into white lead and has for its object to provide an improved stack in which same is accomplished.

In the accompanying drawings forming part of this specification, in which like numbers of reference denote like parts wherever they occur, Figure 1 is a sectional view through a white lead stack embodying this invention; Fig. 2 is a side elevation on an enlarged scale, of a plurality of tiles used to cover the tan-bark; Fig. 3 is a top plan view of a tile used to prevent mixing of the white lead with the tan-bark used in the corroding process; Fig. 4 is an end elevation of same; Fig. 5 is a longitudinal sectional view of Fig. 3; and Figs. 6 and 7 depict a modified form of same in which such tile is shown composed of two coöperating parts.

The chamber or structure 1 is formed with any desired configuration and size and is provided with the usual doors or openings (not shown) to afford access to the interior of same. The floor of the chamber 1 is covered with a layer of tan-bark 2. Tiles 3 are then laid upon said tan-bark and a plurality of combined corroding pots and buckles 4 is arranged in a row upon said tiles, as shown in Fig. 1, said combined corroding pots and buckles being preferably like those disclosed in my copending application, Serial No. 473,631, filed January 22, 1909. Temporary uprights 5 rest upon said first layer of tan-bark and are connected by strips 6 and support a floor 7 upon which another layer of tan-bark 2 is placed. Another layer of tiles 3 is laid upon said second layer of tan-bark and another row of pots 4 is placed thereon. In this manner tier upon tier, as many pots and buckles as desired, may be piled or stacked in the corroding chamber or structure 1. For a description of the conversion of said combined corroding pots and integral buckles into white lead, reference is here made to my Patent No. 906,253, granted December 8, 1908.

As shown in Fig. 2, tiles 3 may be formed with rabbets 8 to overlap each other, so that when laid together a crack will not be formed through which the white lead might run to the tan-bark. By means of this rabbeting such a seam will be formed that even if the white lead enters between two adjacent tiles it can only flow down upon the underneath rabbet, which is of the same material as the rest of the tile.

The tiles 3 may be made either in the form shown in Figs. 3 to 5 or in the form depicted in Figs. 6 and 7. In the first-mentioned form, each tile is an integral body pierced by a plurality of longitudinal passages 9 entered by a plurality of upper openings 10 and a plurality of lower openings 11 which latter are preferably larger in area than the openings 10. As said tiles lie upon the tan-bark, the heat evolved by the decomposition of the tan-bark and the steam, carbon dioxid, and other gases rise through the openings 11, pass through the passages 9, and escape through the openings 10 and circulate through the openings in the plaits of the corroding pots 4, and otherwise pervade the interior of the stack and react with the acetic acid in the cups of the corroding pots to transmute the lead of the pots and buckles into white lead.

In the form of tile shown in Figs. 6 and 7, instead of being constructed as an integral whole an upper section 12 and a lower section 13 contains channels 14 and 15, respectively, which, when united, form a passage 9. The lower section 13 contain openings 11 and the upper section 12 contain openings 10. Dowels 16 fit into notches 17 and hold the sections 12 and 13 from longitudinal or lateral movement, although the location of said dowels and notches can as advantageously be transposed relative to the two sections.

Openings 11 are made larger than openings 10 for the reason that very little tan-bark will enter same by reason of the tiles lying thereon and for the further reason that the increased size of said openings facilitates the ascent of the heat and gases. On the other hand, the openings 10 are made relatively smaller so as to prevent the en-

trance thereinto of much white lead, although such as does flow thereinto can be readily emptied out when the tiles are lifted.

I claim:

1. A white lead stack comprising, in combination, a bed of tan-bark, and a support therefor; a horizontal layer of tiles disposed upon said bed; and a plurality of corroding pots containing buckles resting upon said layer of tiles, said tiles being provided with separate upper and lower series of openings formed through their corresponding faces, the openings of one series communicating with those of the other series and being arranged out of alinement with the same, to permit heat to pass therethrough into contact with said pots, and to prevent the white lead from mixing with said tan-bark.

2. A white lead stack comprising, in combination, a bed of tan-bark, and a support therefor; a horizontal layer of apertured tiles resting upon said bed; and a plurality of buckle-containing corroding pots resting upon said layer of tiles, said tiles having their mutually-adjacent edges provided with overlapping rabbets, to prevent the white lead produced from mixing with the tan-bark.

3. A white lead stack comprising, in combination, a bed of tan-bark; and a support therefor; a horizontal layer of apertured tiles resting upon said bed; and a plurality of buckle-containing corroding pots resting upon said layer of tiles, said tiles having separate upper and lower series of openings formed through their corresponding faces, and having their mutually-adjacent edges formed with overlapping rabbets, the openings of one series communicating with those of the other series, and being arranged out of alinement with the same.

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

ALBERT J. MEIER.

Witnesses:
GLADYS WALTON,
GEORGE G. ANDERSON.