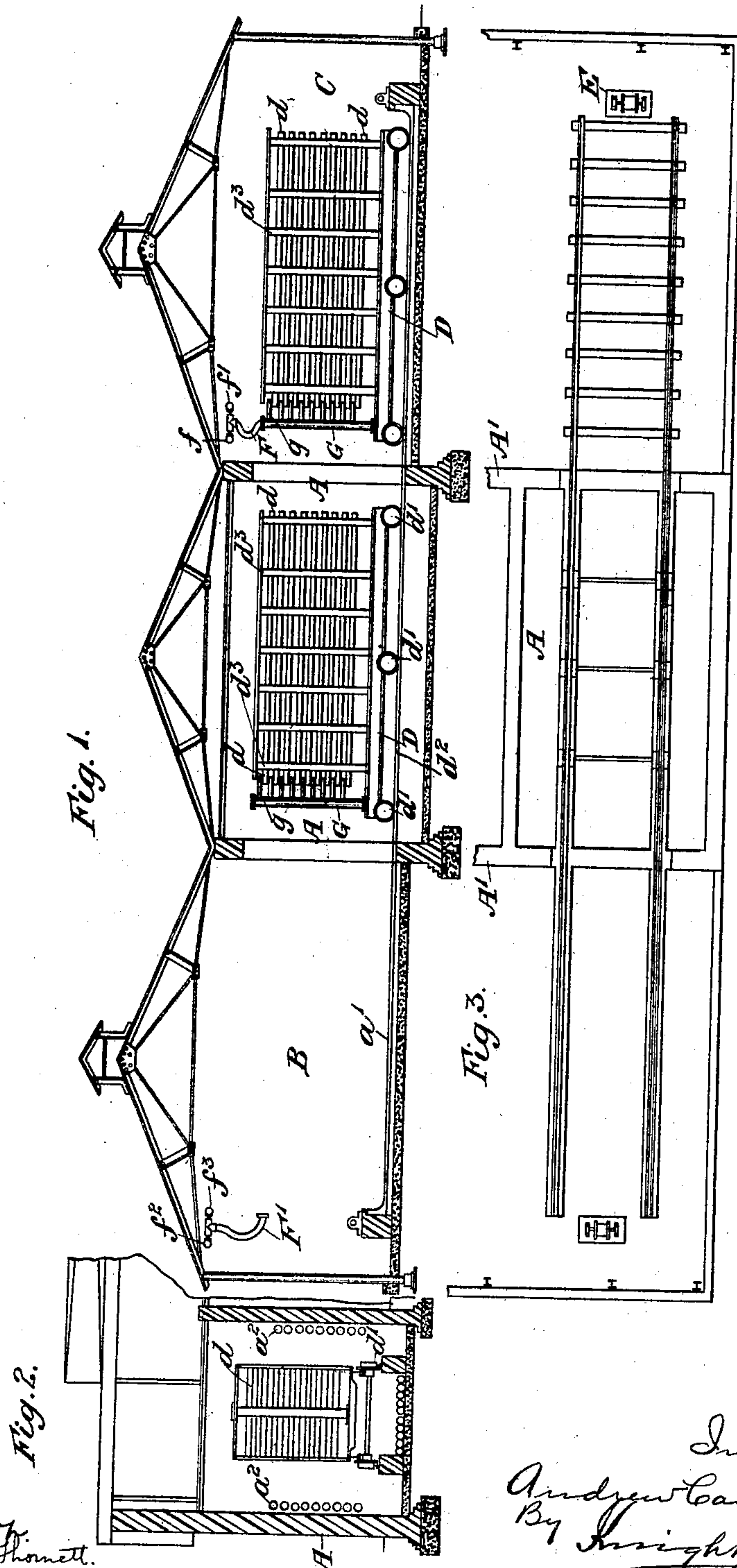


A. CAMPBELL.
 APPARATUS FOR TREATING PARAFFIN WAX.
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999,628.

Patented Aug. 1, 1911.



Witnesses
 J. W. Vignoles
 Gertrude C. Thonett.

Inventor,
 Andrew Campbell,
 By Insight Bros
 attorneys

UNITED STATES PATENT OFFICE.

ANDREW CAMPBELL, OF CROCRANNOCH, RANGOON, BURMAH, INDIA, ASSIGNOR TO THE
BURMAH OIL COMPANY, LIMITED, OF GLASGOW, SCOTLAND.

APPARATUS FOR TREATING PARAFFIN-WAX.

999,628.

Specification of Letters Patent.

Patented Aug. 1, 1911.

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To all whom it may concern:

Be it known that I, ANDREW CAMPBELL, works manager, a subject of the King of the United Kingdom of Great Britain and Ireland, and resident of Crocrannoch, Royal Lakes, Rangoon, Burmah, India, have invented new and useful Improvements in Apparatus for Treating Paraffin-Wax, of which the following is a specification.

10 This invention relates to improvements in apparatus for treating or purifying paraffin wax, to facilitate and economize the working and minimize the original cost of the plant as used heretofore.

15 Heretofore the apparatus for the purpose consisted of sweating apparatus erected on a stationary foundation inside a brick or stone chamber, having a suitable roof and fitted for being heated by steam or hot
20 water pipes, there being within the chamber an erection comprising one or more vertical series of trays each series comprising nine or other convenient number of trays one over the other. Heretofore the operation of filling the said trays with melted
25 paraffin wax or scale, allowing it to congeal and then sweating it, was effected in the said chamber; but in accordance with the present improvements the apparatus is
30 mounted on a carriage having three or other convenient number of sets of wheels running on rails so that the carriage may be removed from the brickwork heating chamber into an adjacent open cooling shed immediately after the sweating operation is
35 completed. The apparatus is then recharged with paraffin scale and the scale allowed to congeal. It is then drawn back into the sweating chamber and the process
40 repeated.

I prefer to employ an open shed at either side of the brickwork heating chamber with the apparatus arranged in a tandem position so that the one or other may be drawn
45 into or from the brickwork heating chamber at will.

The apparatus may be traveled to and from the heating chamber by means of winches at each end of the rails which are
50 extended through the heating chamber into the open sheds at either side. In a case of an arrangement of a center heating chamber with open sheds at either side the operation is as follows and is as shown in the
55 drawings.

Figure 1 is a section through the brickwork chamber A; with the outside sheds B, C, at either side. Fig. 2 a section through the same chamber, at right angles to Fig. 1. Fig. 3 a sectional plan.

As shown more particularly in Fig. 1 the apparatus containing the trays d for the purpose of sweating the paraffin wax is mounted on a carriage D having three or other convenient sets of wheels d^1 running
60 on rails d^2 . The apparatus or carriage carrying the trays is filled with the melted wax or scale in the open shed either B or C at the end of the brickwork heating chamber and allowed to congeal. The doors of
70 the heating chamber A are then opened and the carriage carrying the trays is run into that heating chamber; the apparatus being traveled to and from the heating chamber by means of the winches E Fig. 3 at each
75 end of the rails which are extended through the heating chamber into the open sheds at either side. The doors of the heating chamber are now closed and the usual sweating operation effected, the liquids
80 separated during that operation being run from the trays to any suitable low level tank. After the sweating operation is effected the carriage is run back from the heating chamber A, into one of the open
85 sheds and the wax allowed to cool and then removed. The carriage is now recharged in this open shed and run back again into the heating chamber for sweating.

By the aforesaid arrangement the temperature of the heating chamber is maintained at a temperature not below a certain minimum thereby economizing in steam heating power through obviating the alternate cooling and heating of the said chamber. The improved arrangement largely increases the capacity of the apparatus, while effecting economy in steam heating at the same time. The filling of the trays with the water for floating the scale, as usual,
100 and the charging of the trays with the melted scale may be effected by the overhead flexible metallic tubings F, F^1 provided in both of the outer open sheds,—each tubing being provided with the two
105 cocks f f^1 and f^2 , f^3 connected with the water supply and the melted scale supply; the end of the tubings F F^1 being connected to the tubular columns G carried on the traveling carriage D as shown at the lefthand
110

side of Fig. 1 the columns being provided with the short branch pipes g provided with cocks, for supplying both water and scale to the trays, the tubings F F^1 being dis-
5 connected from the column when the trays are filled and the carriage is ready for being traveled into the heating chamber A . There may be any convenient number of the
10 aforesaid arrangements of heating chambers and cooling sheds in tandem—say six arrangements—placed side by side, one portion of the next heating chamber A^1 , and either end cooling sheds, being shown in Fig. 3. In this case each length of rail has
15 its own end winch. The chamber A may be heated by means of the steam or hot pipes a^2 Fig. 2.

The superposed trays d Fig. 1 for containing the paraffin wax may be of any convenient number—say nine in number—as
20 shown more particularly in Fig. 1, and are of the usual rectangular shape being supported one over the other from the upright supports d^3 by means of the usual support-
25 ing cross bars or pipes below the trays.

Claims:

1. A truck for conveying paraffin wax and like substance to be treated having a plurality of trays arranged thereon in superposed relation, a vertical supply pipe dis- 30 posed adjacent said trays, and a plurality of branch pipes leading from said supply pipe to said trays for distributing the material thereto.

2. In a purifying apparatus, the combina- 35 tion with a plurality of treating chambers arranged in series, of a transporting vehicle therefor comprising a car, a plurality of trays arranged on said car in superposed relation, a distributing pipe vertically dis- 40 posed adjacent one end of the trays and having delivery branch pipes extending therefrom into said trays, and a supply main in the end chambers of the series adapted to be coupled with and deliver to 45 said distributing pipe the material to be purified.

ANDREW CAMPBELL.

Witnesses:

DAVID BURGESS MEIKLE,
RICHARD GILLIES NEILSON.