

Nov. 4, 1924.

1,514,512

A. J. FISHER

MEANS FOR USE IN STACKING CASES

Filed Sept. 6, 1923

Fig. 1.

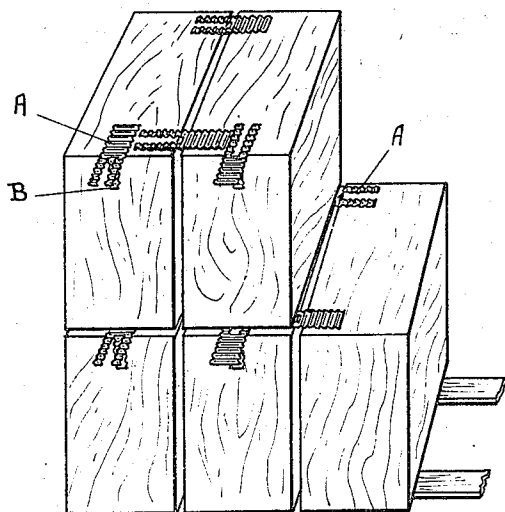


Fig. 3.

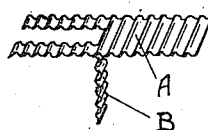


Fig. 5.

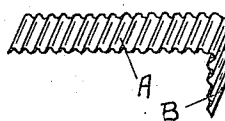


Fig. 2.

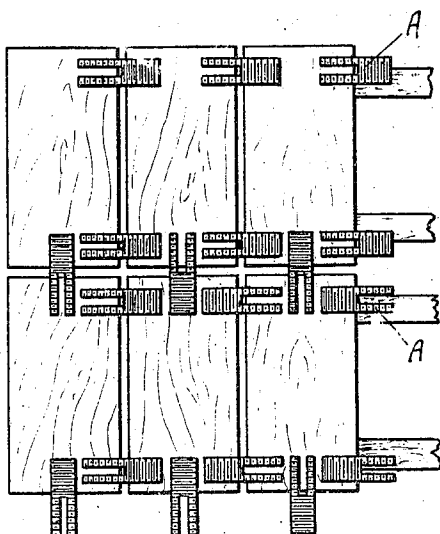
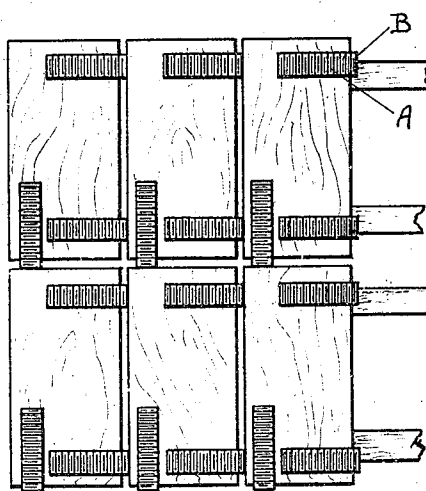


Fig. 4.



INVENTOR

ARTHUR J. FISHER

BY

Handwritten signature

ATTORNEY

UNITED STATES PATENT OFFICE.

ARTHUR JAMES FISHER, OF PORT ADELAIDE, SOUTH AUSTRALIA, AUSTRALIA, ASSIGNOR TO SOUTH AUSTRALIAN STEVEDORING COMPANY, LIMITED, OF PORT ADELAIDE, AUSTRALIA.

MEANS FOR USE IN STACKING CASES.

Application filed September 6, 1923. Serial No. 661,335.

To all whom it may concern:

Be it known that I, ARTHUR JAMES FISHER, a subject of the King of Great Britain and Ireland, residing at Lipson Street, Port Adelaide, State of South Australia, Commonwealth of Australia, have invented a certain new and useful Means for Use in Stacking Cases, of which the following is a specification.

The object of this invention is to ensure the circulation of the air all around cases of fruit or other produce which are stacked in a cool chamber, particularly in the cool chamber of a ship.

It has been customary heretofore when stacking such cases to place below each row of cases in each layer a long plain lath or laths which permits of some circulation, but not a complete circulation since the air currents can flow horizontally over the bottoms and tops only of the cases and are confined and checked even then.

According to this invention all of the cases in each layer are separated one from another by a space of approximately $\frac{1}{4}$ inch at the sides and ends and from the layer next above by a similar space by means of spacer devices each of which comprises two members or arms set approximately at right angles the one to the other the one member resting upon the top of one or more of the cases and the other member hanging between the sides or ends of adjacent cases.

In order that the invention may be the more clearly understood I will describe the same with reference to the accompanying drawings in which—

Fig. 1 is a perspective view showing portion of a stack of cases provided with air spaces according to the invention.

Fig. 2 is a plan view, also showing portion of a stack of cases provided with air spaces according to the invention.

Fig. 3 is a view showing separately the form of the spacer device shown in position in Figs. 1 and 2.

Fig. 4 is a similar view to Fig. 2 but showing the use of another form of spacer device.

And Fig. 5 is a similar view to Fig. 3 showing the spacer device shown in position in Fig. 4.

The spacer devices shown in Figs. 1 to 3

comprise a number of T shaped devices the top or cross member A of each device resting upon the tops of two adjacent cases, and the stem or second member B hanging between the sides or ends of adjacent cases.

The top member A is of sufficient length only to ensure sufficient support for the superimposed layers of cases, approximately five inches, and the stem member B is of sufficient length to hold the device against cross movement, say $2\frac{1}{2}$ inches, while the width of both the members is approximately $1\frac{1}{2}$ inches.

According to the modification shown in Figs. 4 and 5 the spacer devices are made of L shape the one arm or member A as before resting upon the top of the case and the other arm or member B hanging between the sides or ends of adjacent cases.

As before the horizontal arm A, that which is placed upon the top of the case, is of sufficient length only to ensure support for the superimposed layers of cases, say 8 or 9 inches, and the hanging arm B is of sufficient length to hold the device against cross movement, say 3 inches, while the width of both members is approximately $1\frac{1}{2}$ inches.

The measurements specified are approximate and given by way of example only and may be increased or decreased as may be considered desirable.

The spacer device may be made of metal or other material. For instance it may be stamped from corrugated sheet metal as shown in the drawings or it may comprise a wooden core within a sheet metal casing to provide lightness with the necessary strength.

It will be evident that when the cases are stacked in the manner described and illustrated there is a space all around the top, bottom, sides and ends of each case through which the air may circulate freely, hence the contents of all the cases may be kept at the desired temperature.

What I claim is—

1. A device for use in stacking cases of fruit or other produce comprising two members or arms set approximately at right angles the one to the other the one member being adapted to rest upon a comparatively small part of the top of one or more cases and the other member being

adapted to hang between the sides or ends of adjacent cases, substantially as described.

2. A spacer device for use in stacking cases of fruit or other produce comprising a T shaped device the top or cross member of which is adapted to rest upon a comparatively small part of the tops of two adjacent cases and the stem of which is adapted to hang between the sides or ends of adjacent cases, substantially as described.

3. A spacer device for use in stacking cases of fruit or other produce comprising an L shaped device the one member of

which is adapted to rest upon a comparatively small part of the top of the case and the other member of which is adapted to hang between the sides or ends of adjacent cases, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in the presence of two subscribing witnesses this 30th day of July, 1923.

ARTHUR JAMES FISHER.

Witnesses:

ARTHUR GORE COLLISON.

KATHLEEN BOSTWYCKE SAUNDERS.