

E. WHEELER.
Box-Pile.

No. 213,855.

Patented April 1, 1879.

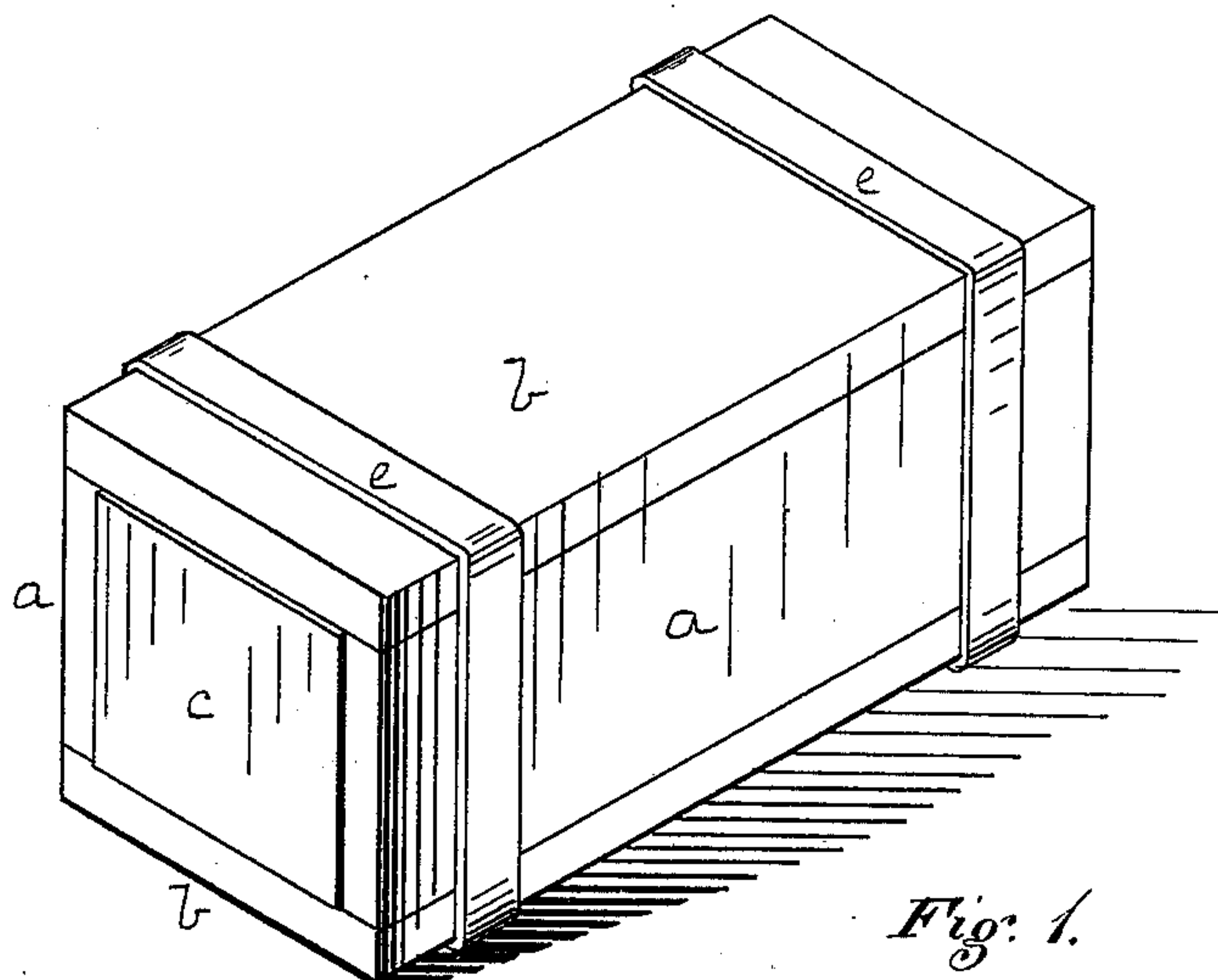


Fig. 1.

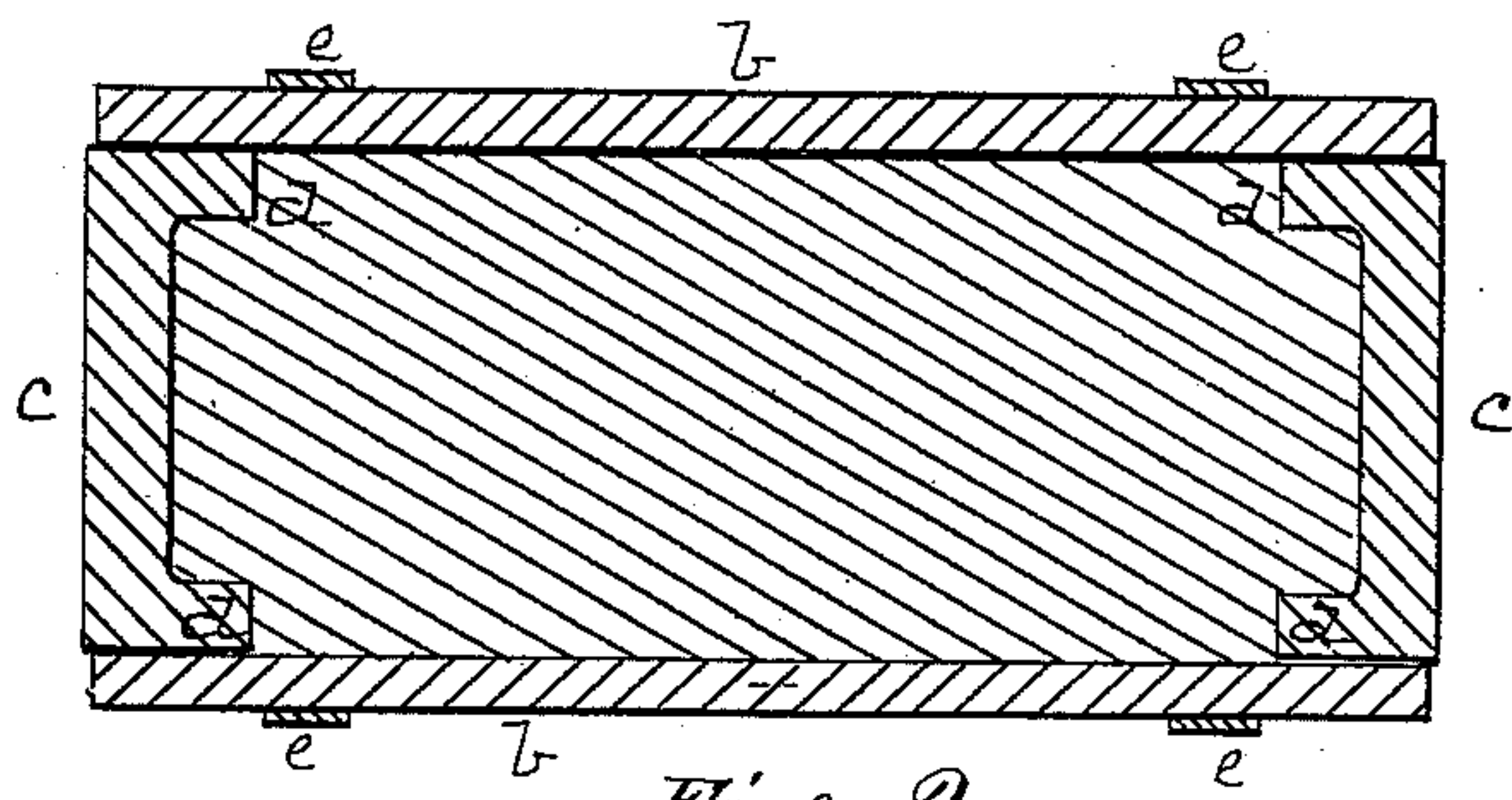


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

ELBRIDGE WHEELER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOX-PILES.

Specification forming part of Letters Patent No. **213,855**, dated April 1, 1879; application filed May 31, 1878.

To all whom it may concern:

Be it known that I, ELBRIDGE WHEELER, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented or discovered a new and useful Improvement in Forming Piles in Manufacture of Iron and Steel; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a perspective view of my improved box used in piling, and Fig. 2 is a sectional view thereof.

My present invention relates more particularly to an improvement in that class of scrap boxes or cases referred to in Letters Patent granted to me April 14, 1874, No. 149,818.

In my present improvement I make use of an end piece having a flange on one or more of its edges as an improved means of closing the ends of such boxes or cases.

The sides, top, and bottom of the box consist of any suitable arrangement or construction of plates *a a b*, preferably so made or fitted together as to give joints sufficiently tight to prevent the injurious action of exterior air or gases on the contents of the box, and so as, by the use of the proper means, as heat or heat and pressure, to unite in working by fusion or welding. Thus made, they will lap onto and support each other, and the better keep their place during the preliminary operations.

My improved end pieces, for closing the ends of the box or case, are shown at *c*.

End pieces for such purpose, as heretofore used, have commonly been of uniform thickness at the edges as at the middle, and the comparatively thin edges did not give a sufficiently broad bearing on the top, bottom, and side plates to be retained in place without the addition of other fastening devices for the purpose.

In my improvement I secure an edge-bearing in the end pieces sufficiently broad to overcome the difficulty above referred to, by making a flange, *d*, along one or more edges of each end piece, *c*, such flange projecting laterally a distance equal, or about equal, to the thickness of the end piece, more or less, though if the end piece be made of thin sheet or plate iron a much deeper flange may be required, and should be made.

Preferably I make the flange on two opposite edges, that for ordinary purposes being sufficient; but by cutting out or lapping the corners, such flange may be made to extend around the entire periphery of the end piece. Such end pieces may be conveniently made by using a plate of the width of the interior of the box, and a little longer than the vertical height, and bending the ends over so as to form the flanges *d*, or bending at one end so as to form only a single flange. Such flanges give broad parallel, or nearly parallel, edges, one of which rests against one exterior plate or side, and the other (if two be used) against the opposite plate or side of the box or case. Such end pieces may also be cut to the proper length from previously-rolled channel-bars, or may be made in other suitable way, such as will give a flange on one or more edges of each end piece, of about the proportions above set forth with reference to the function named.

The joints of the ends should be made or fitted in like manner and with reference to the same results as the side and top and bottom plates, and the end pieces may be inserted with the flanges extending outwardly, if so preferred.

The central hatching in Fig. 2 merely indicates the scrap filling or the space to be filled with scrap.

After the filling is done and all parts are in place, the whole is banded together by bands *e*, or secured in other suitable way.

After the joints are sufficiently united or closed the bands are easily knocked off, if a finely-finished product is required, or otherwise, especially if of light material, they may be worked in.

I thus secure at a reduced expense a box or case for piling scrap which shall be at once tight, strong, and self-supporting, such as is required in the art.

I claim herein as my invention—

A box or case for piling iron or steel scrap, consisting of suitable top, bottom, and side plates and flanged end pieces, substantially as set forth.

In testimony whereof I have hereunto set my hand.

ELBRIDGE WHEELER.

Witnesses:

J. J. McCORMICK,
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