

C. T. LYND.
COOKING-STOVE.

No. 195,830.

Patented Oct. 2, 1877

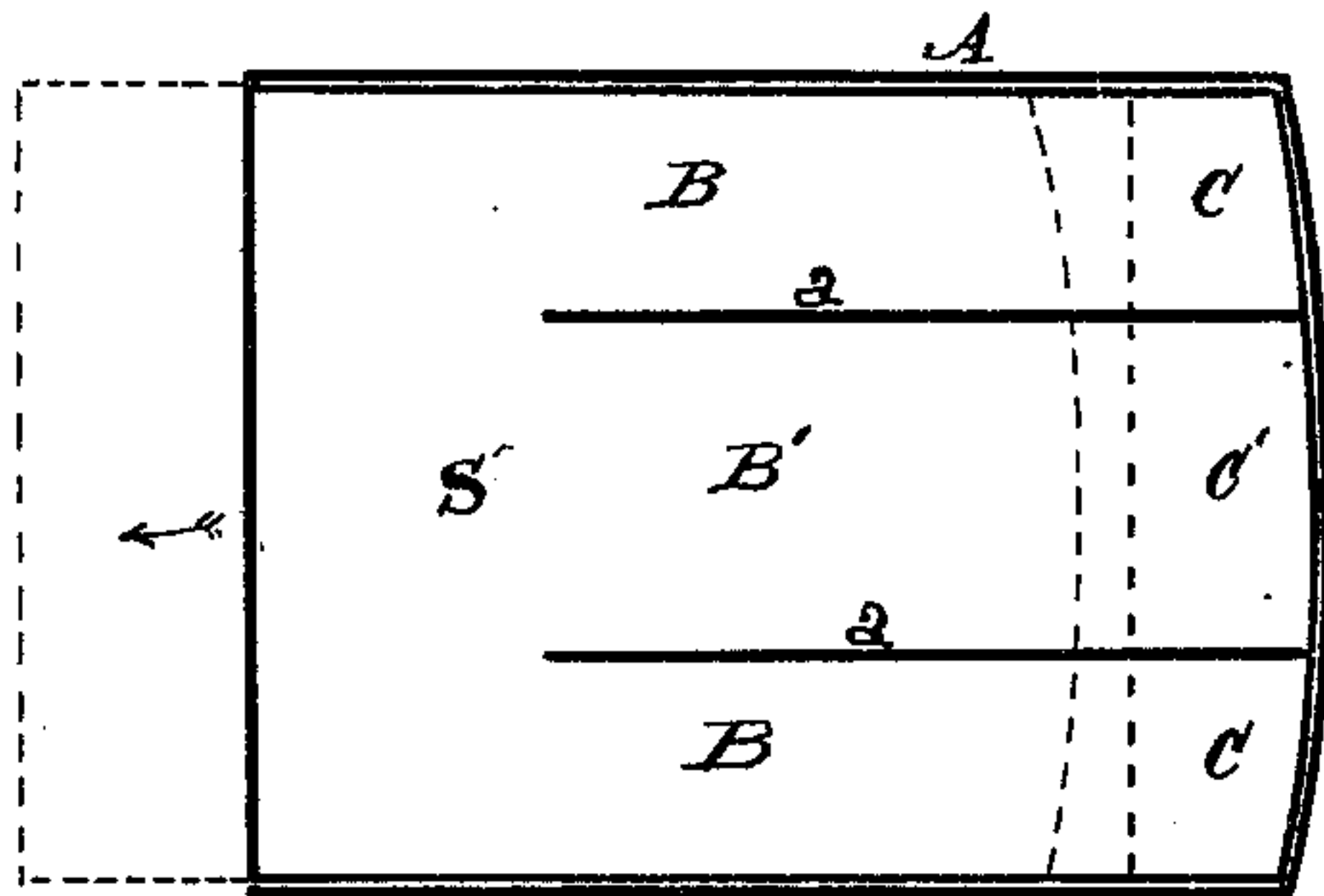


Fig. 1.

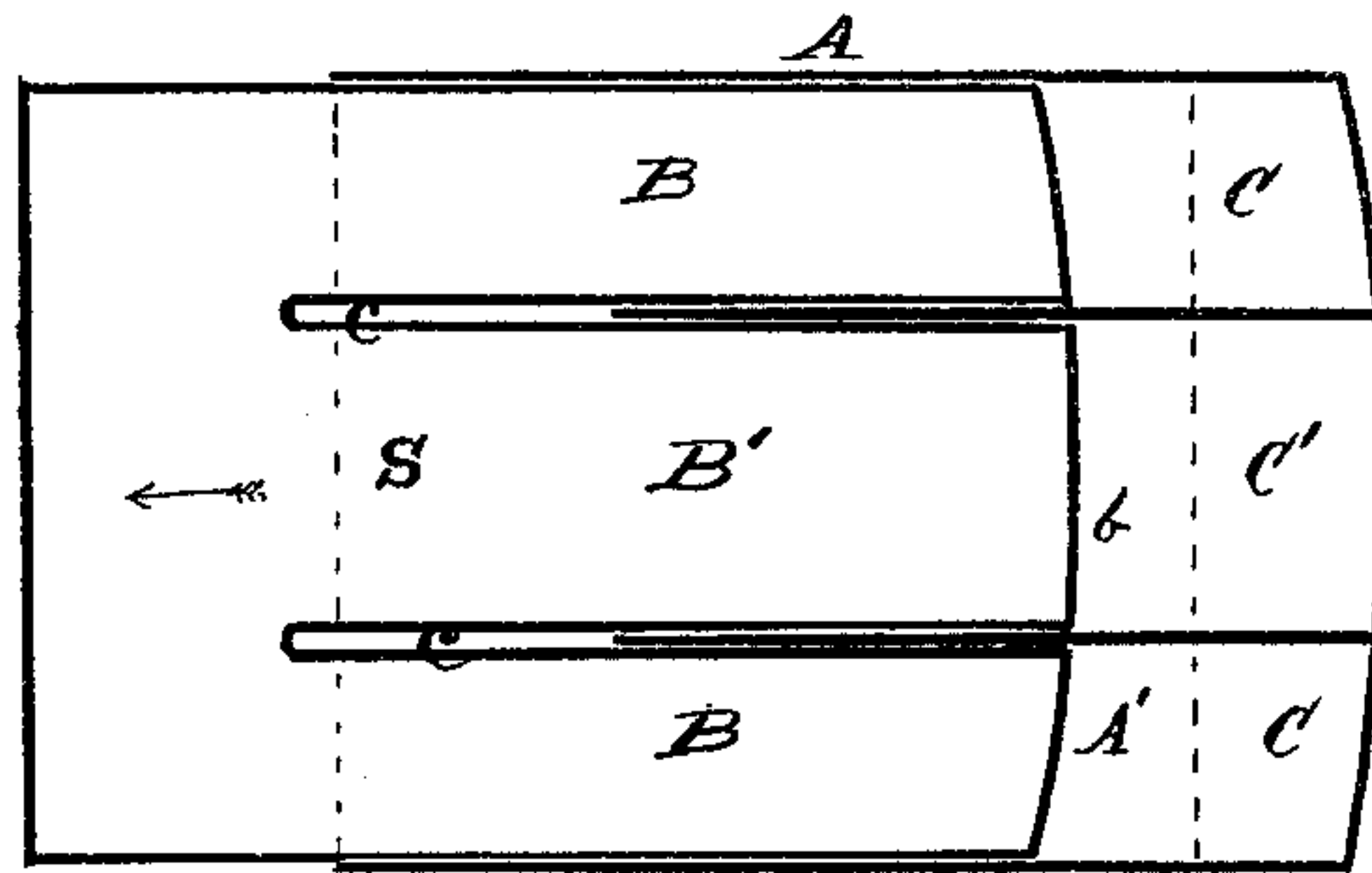


Fig. 5.

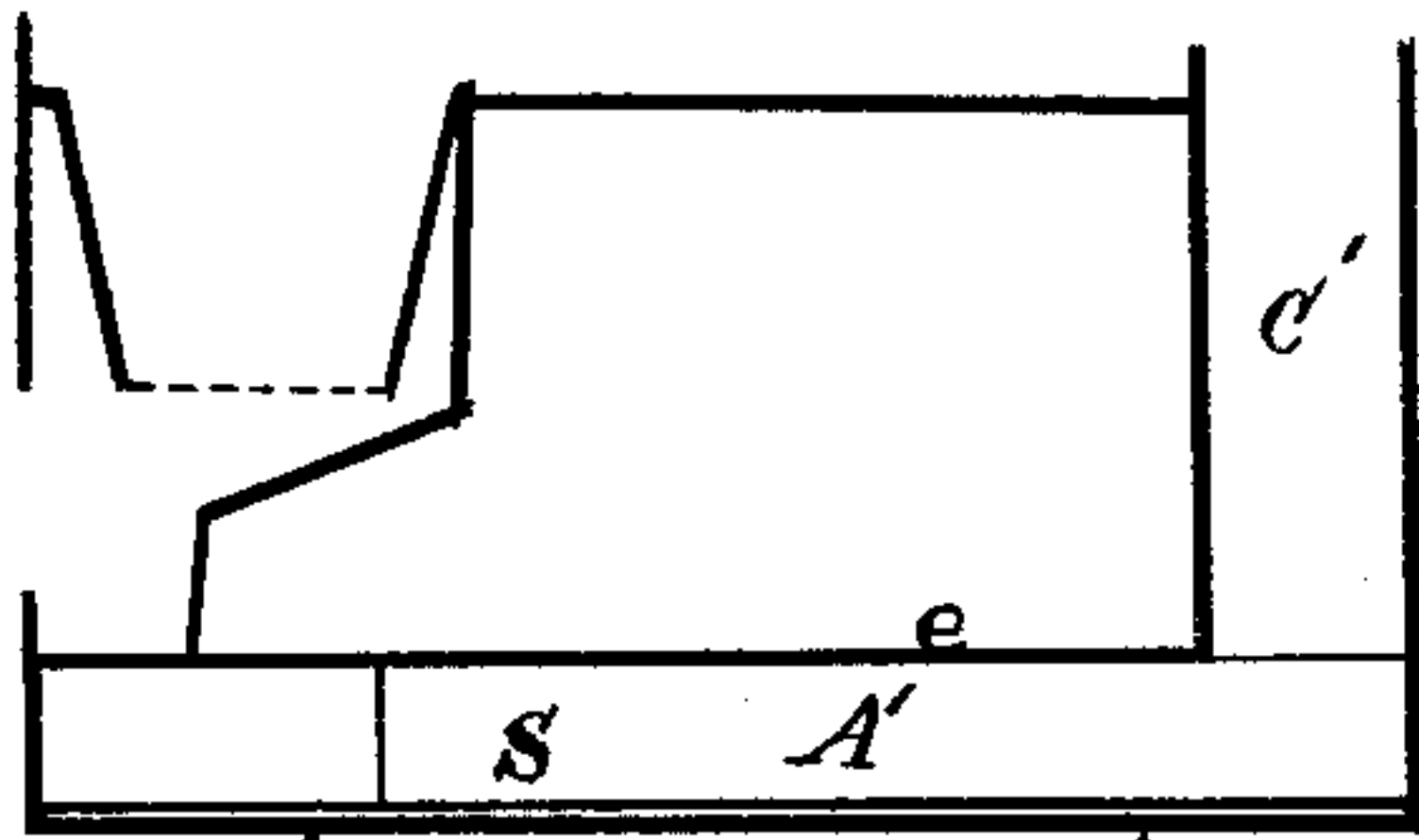


Fig. 2.

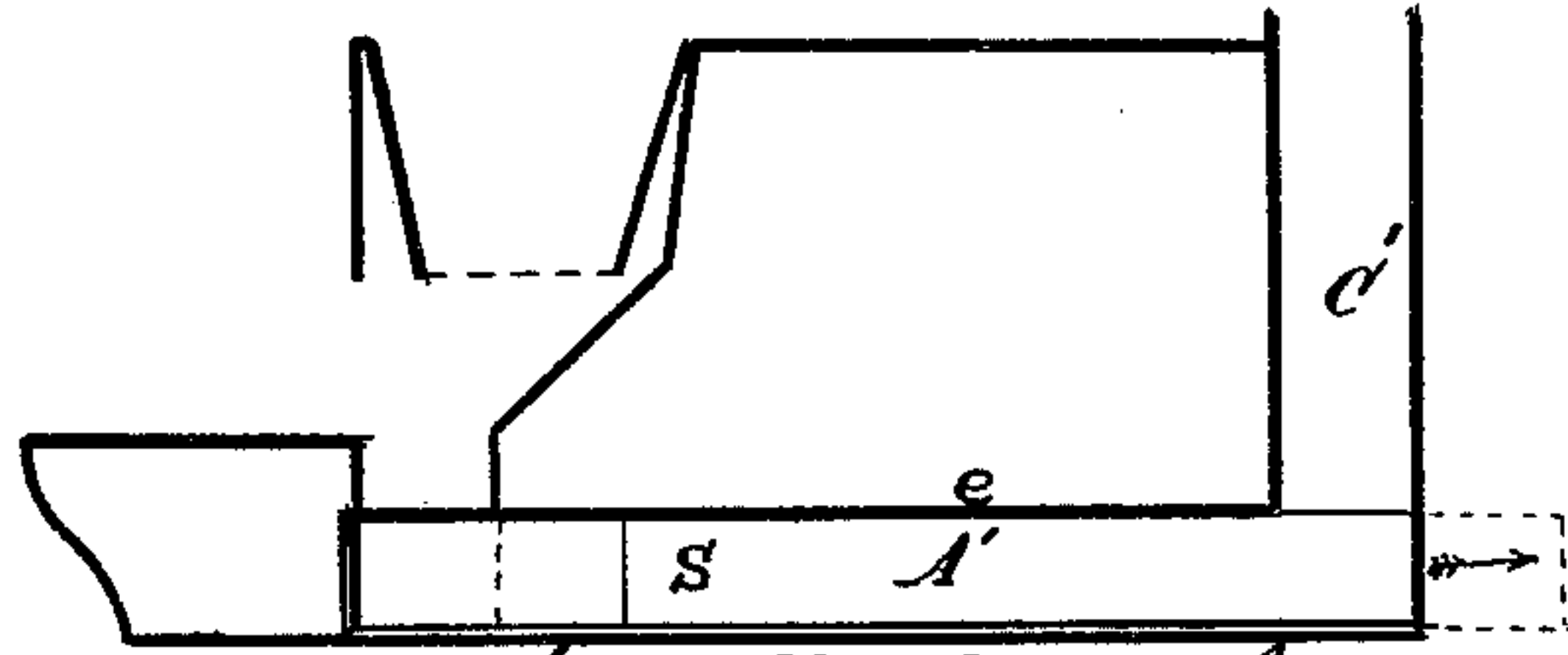


Fig. 6.

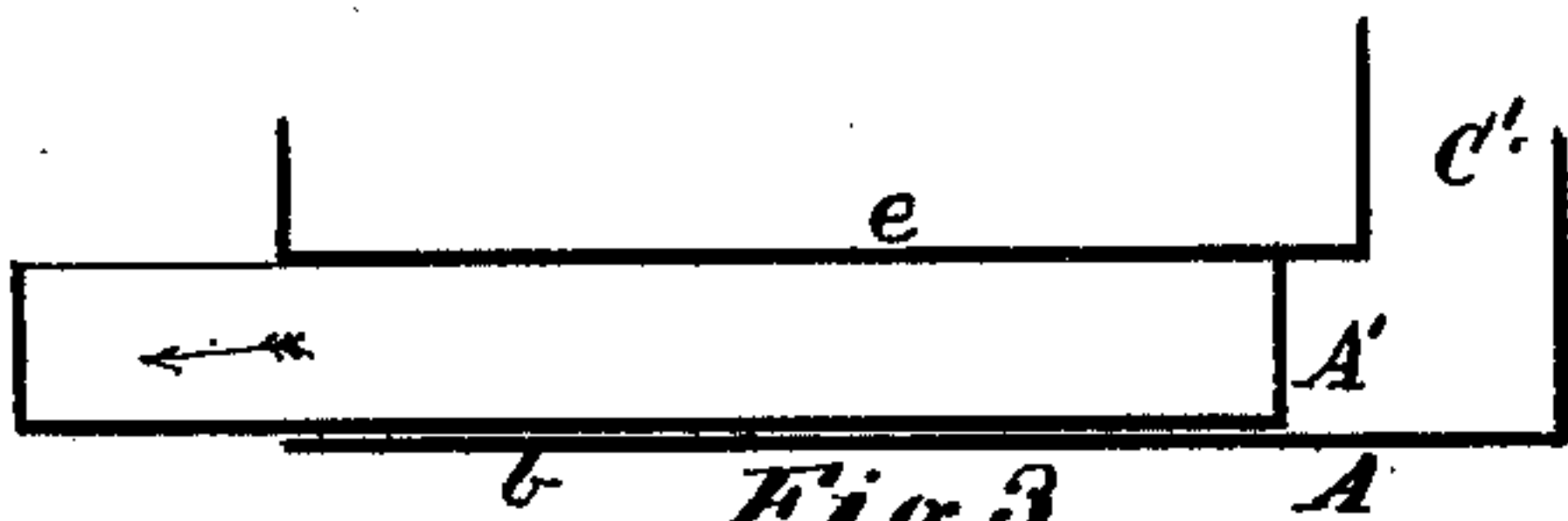


Fig. 3.

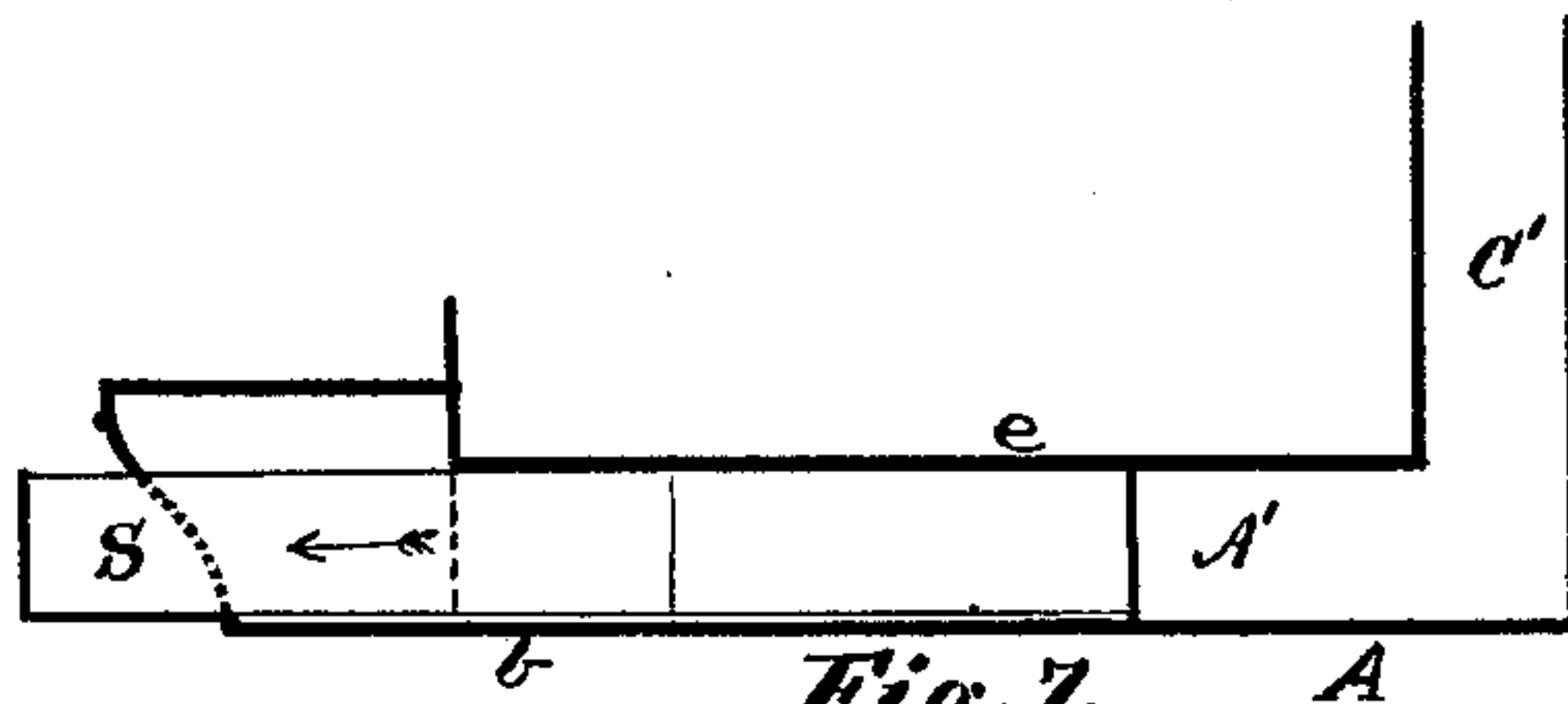


Fig. 7.

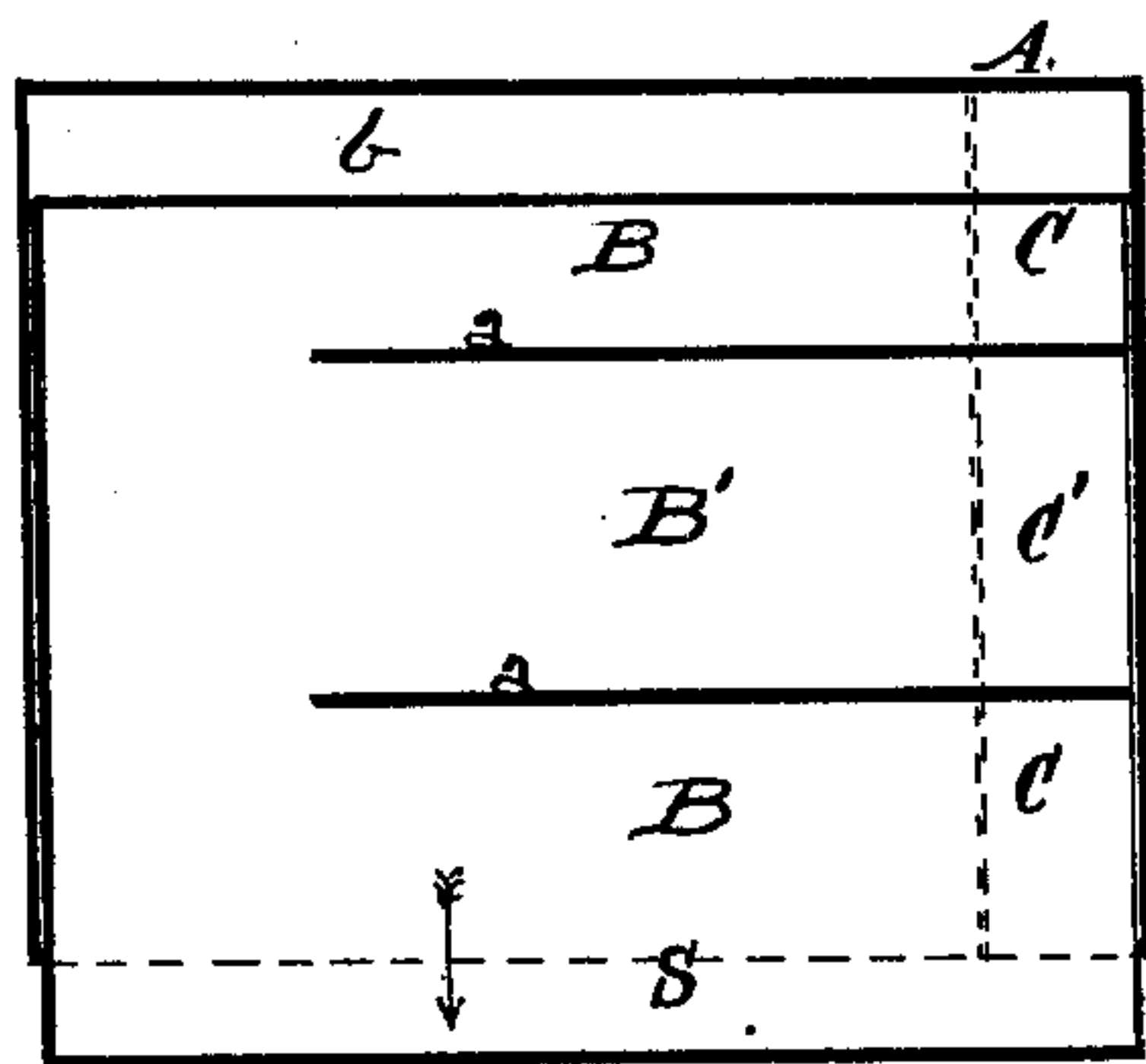


Fig. 4.

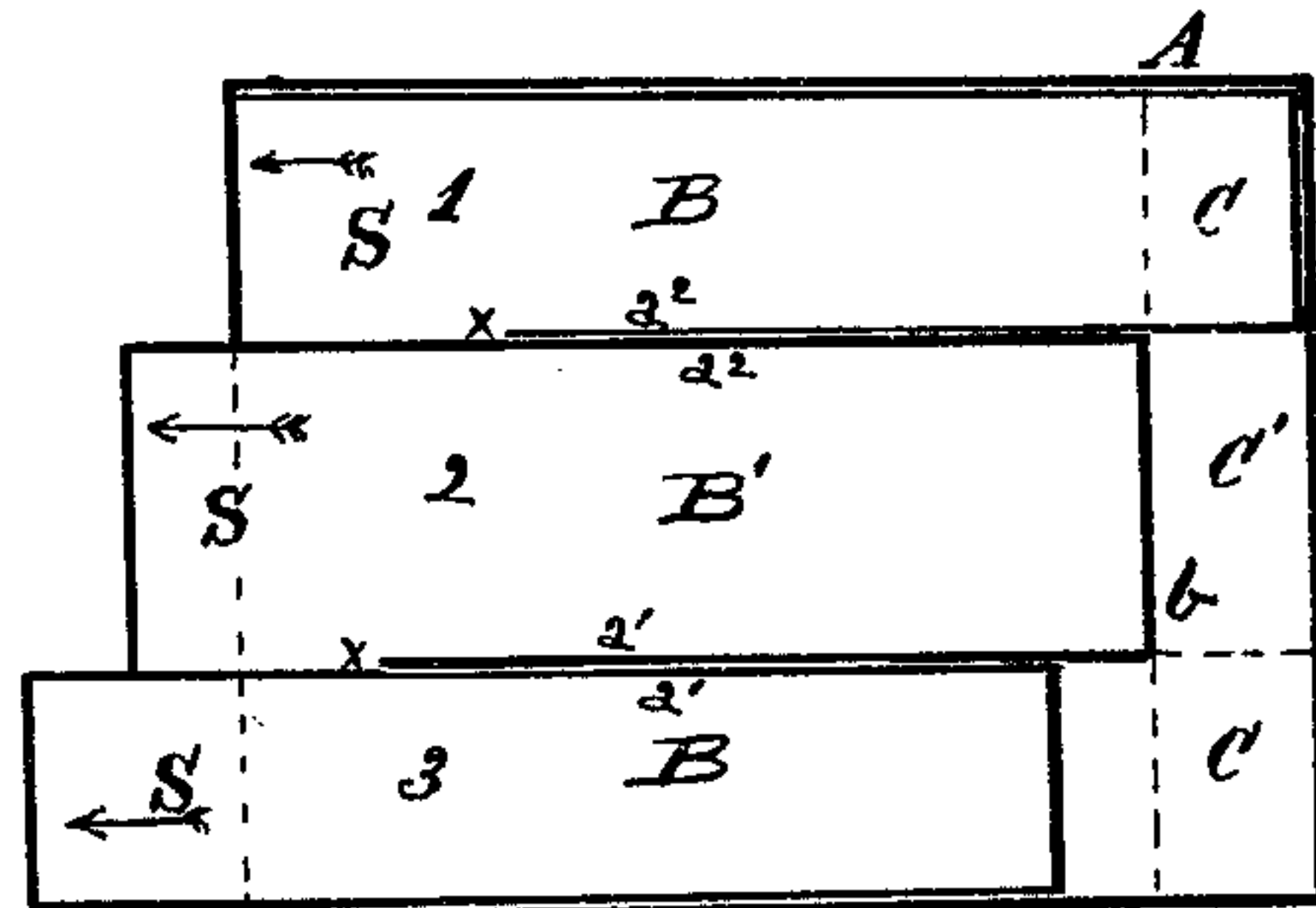


Fig. 8.

Witnesses. { William F. Sellink
 { Chas. J. Huskirk

Coleman J. Lynd,
His Attorney
Alex. Sellink,
Inventor.

UNITED STATES PATENT OFFICE.

COLEMAN T. LYND, OF ALBANY, NEW YORK, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JOHN E. MILLER, OF SAME PLACE.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **195,830**, dated October 2, 1877; application filed
March 7, 1877.

To all whom it may concern:

Be it known that I, COLEMAN T. LYND, of the city and county of Albany, State of New York, have invented certain new and useful Improvements in Stoves, which improvements are fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a plan view of the base-chamber of the stove with my invention applied thereto. Fig. 2 is a sectional elevation of the same. Fig. 3 is a sectional elevation of the same with the soot-drawer partly removed. Fig. 4 is a plan view illustrating a sidewise manner of removal of the soot-drawer. Fig. 5 is a plan view of the base-chamber of the stove with a modified form of soot-drawer in place. Fig. 6 is a sectional elevation of the invention, illustrating the removal and insertion of the soot-drawer from the rear. Fig. 7 is a sectional elevation of the invention made in the modified form shown in Fig. 5, and illustrating the same with the soot-drawer partially removed. Fig. 8 is a plan view of another modification of the form of the soot-drawer that may be used to accomplish the object of this invention; and Figs. 9, 10, and 11 are perspective views of the modifications of forms of the soot-drawer represented in plan views in Figs. 1, 5, and 8.

The object of my invention is to furnish with a stove or range a ready means for removing all the soot that may accumulate and form in the chamber in the base of the stove through which the hot products of combustion pass when a revertible draft is employed, and thereby enable an operator to quickly, and in a cleanly manner, free the said chamber, or the flues in the same, from the ashes that may lie on the bottom of the same, and the soot that may form on the sides and upper plate covering the said chamber or flues.

In the drawings, A represents the base of the stove. A' is the chamber made in said base, which contains the usual flue-strips for dividing said chamber into flues for producing a horizontal revertible passage of the products of combustion through the same.

In the practice of my invention I omit affixing in the chamber A', permanently, the usual flue-strips $a^1 a^1$, (shown in Fig. 10,) and commonly employed for dividing the said chamber into separate flues for producing a revertible draft,

and in lieu of such flue-strips I employ a drawer, S, having an extension from front to rear and from side to side, and with such a height of sides and ends $x^1 x^2$ as to cause the said drawer to nicely fill the chamber A', as shown in Figs. 1, 2, and 10, with the bottom resting on the bottom plate b , and the upper edges of the sides x reaching up to the lower side of the plate e forming the top wall of chamber A' or the bottom of the oven, and the rear end reaching back so as to touch the back plate b' of the stove or range, as shown in Fig. 9, with the front end terminating at the front of chamber A'. The said drawer has fixed with it the flue-strips $a a$, reaching up to the lower side of the plate e of the stove, to divide the chamber-room of said drawer into flues B B and B', when three flues are used, or into only two flues, as has been practiced in stoves and ranges.

The flue-strips $a a$ are so placed as to range perpendicularly with the flue-strips $e' e'$ made in the rear of the stove, and separating the rear vertical flues C C and C'. (Shown by full and dotted lines in Figs. 1 and 9.)

The said drawer thus constructed may be inserted into the chamber A' from the front, as indicated by full and dotted lines in Figs. 1, 3, and 7, or from the rear, as indicated in Fig. 6, or from a side, as in Fig. 4, provision being made in the front or rear end plate, or a side plate of the stove or chamber A', for an opening for such insertion, when an end of the drawer may be employed to fill such opening, or a side may operate to do the same.

When the drawer S is fully introduced into the chamber A' the said drawer will be made to comprise the said chamber, while the flue-strips $a a$ will operate the same as the flue-strips heretofore employed for producing the common horizontal flues in the base of a stove, and the flues B B and B' made in the drawer will be made to communicate with the vertical flues C C and C' substantially in the same manner as heretofore in stoves.

When, after the stove has been operated for some length of time, so that ashes have accumulated in the bottom of the drawer S, and soot on the sides of the same and the flue-strips $a a$ and on the lower surface of the plate e immediately above the drawer, the said drawer is to be withdrawn, when the ashes lying on

the bottom of the drawer and the soot adhering to the sides and the flue-strips will be carried out with the drawer, and while the said drawer is being withdrawn from chamber A' the upper edge of the end or side of the drawer last leaving the chamber A' will move in contact with the lower side of plate *e*, and scrape from its lower surface the soot that may have accumulated on the same, which soot thus scraped off will fall down into the drawer. When the drawer has been fully removed the ashes and soot are to be thrown out, and the drawer again inserted within chamber A', there to remain until it is desired to again clear the chamber A' of the ashes and soot there accumulated.

It may be readily seen that by my invention the soot that rapidly accumulates in the base-chamber of stoves burning soft coal may be readily removed, in a cleanly manner, at any time desired. It may also be readily seen that my invention may be applied to stoves or ranges of all kinds that have flues in the base for a revertible draft; and it is evident that when the chamber A' of the stove is provided with permanently-fixed flue-strips *a' a'*, as has been heretofore the practice of the trade, and as shown in Figs. 5 and 10, the drawer may be provided with slotted or duplex flue-strips *a² a²* to inclose flue-strips *a' a'*, as shown in the said figures, and that in so doing my invention would be in effect applied and operative to produce the same results. It is also evident that where the flue-strips *a' a'* are permanently fixed in the base-chamber, as illustrated in Figs. 5 and 10, two or more drawers, according to the number of flues employed, may be used in lieu of a single drawer, with

substantially the same results, as such drawers, when used in twos or threes, as in Figs. 8 and 11, would, in their aggregate capacity, fill the chamber A', and operate the same as a single drawer with flue-strips, when the sides of the drawers touching each other are made to terminate at *x*, as shown in Fig. 11. In such a case a wire or rod, *x'*, may be employed with each drawer to connect its front with the terminating end of the sides intended to operate as flue-strips when the drawers are in place, to strengthen the said front of the drawer and prevent its being bent forward when the drawer is withdrawn.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a stove or range having chamber A' in its base for the circulation of the hot products of combustion beneath the plate *e*, the combination, with said chamber, of the removable drawer S, adapted to enter and occupy the same in its full extension from front to rear and from side to side, substantially as and for the purpose set forth.

2. The combination, with chamber A' in the base of a stove or range, of the drawer S, adapted to occupy said chamber in its full extension in all directions, and provided with flue-strips *a a*, ranging, when said drawer is in place, with the vertical flue-strips of the rear vertical flues of the stove, substantially as and for the purpose set forth.

COLEMAN T. LYND.

Witnesses:

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WILLIAM F. SELKIRK.