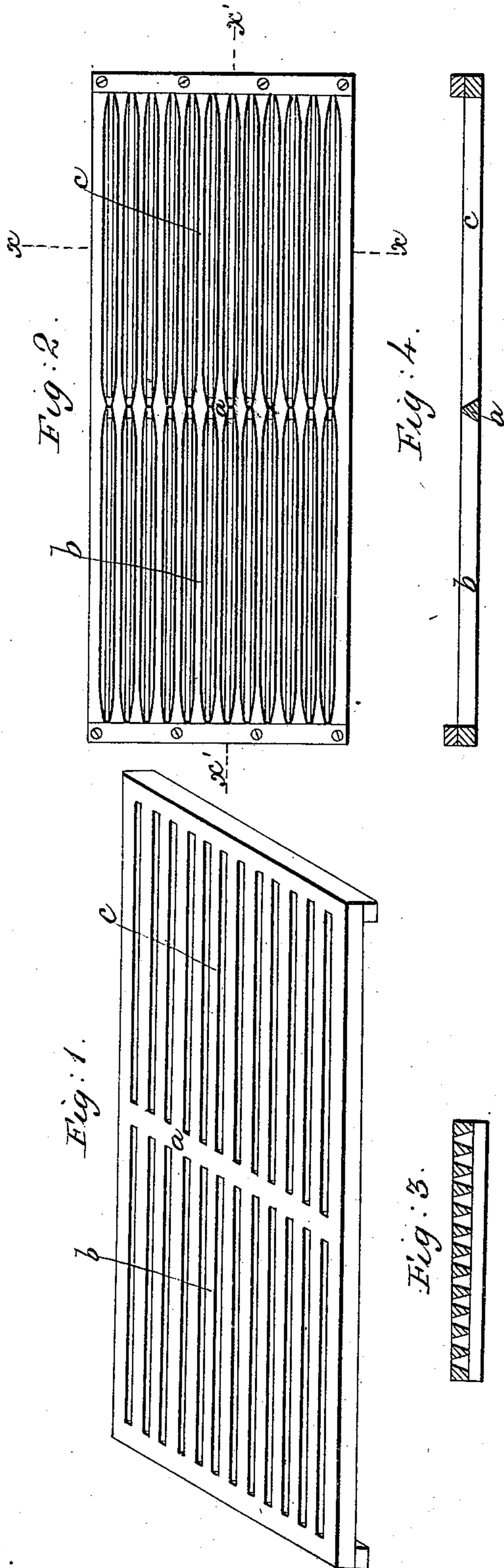


R. G. HUNT.

Wooden Sieve for Gas Purifiers.

No. 40,264.

Patented Oct. 13, 1863.



Witnesses.

T. L. Lindwell
M. S. Murtry

Inventor
Richard G. Hunt

UNITED STATES PATENT OFFICE.

RICHARD G. HUNT, OF NEW YORK, N. Y.

IMPROVEMENT IN WOODEN SIEVES FOR GAS-PURIFIERS.

Specification forming part of Letters Patent No. 40,264, dated October 13, 1863.

To all whom it may concern:

Be it known that I, RICHARD G. HUNT, of the city and county of New York, and State of New York, have invented certain new and useful Improvements in Slotted Solid-Wood Sieves suitable for Gas Purifiers; and I do hereby declare that the following is a full and accurate description thereof, reference being had to the annexed drawings, and to the letters of reference thereon.

Hitherto the slots and bars of solid-wood slotted sieves for gas-purifiers have been made to extend the length of the sieve, except the end wood connection. The sieves being about thirty inches square, the bars are constantly springing and warping, so as to close or partially close some slots and open others, in the one case stopping the gas and in other letting the lime fall through and allowing the gas to pass free of contact with lime.

My said invention consists in a mode of construction by which these defects are substantially cured.

In making this sieve I leave a portion of the solid wood of which the sieve is made in the middle part of the sieve or at some proper place or places between the ends of the sieve, so that the sieve, when constructed, consists of two or more sets or series of slots and bars cut in the solid wood. In practice two sets or series of slots and bars, as shown in the drawings, will be found to answer, but the sieve will be stronger and more durable if made in three sets, although more expensive and not so free for the circulation of gas.

The drawings illustrate my invention, Figure 1 being a perspective top view of the sieve; Fig. 2, a perspective bottom view of the same; Fig. 3, a section through $x x$, Fig. 2; Fig. 4, a longitudinal section through $x' x'$, Fig. 2.

Letter *a* represents the solid-wood connection between the two sets of bars *b* and *c*. It is beveled off toward the under side, as shown in the drawings, to prevent the lodgment of lime.

The slots may be made in the same manner and by the same machine as described in my patent of December 2, 1862, with the exception of leaving the solid-wood brace or connection in the middle.

My invention is applicable to round or irregular-shaped sieves as well as square sieves. The slots should be three sixteenths of an inch wide on the top side and half an inch wide on the bottom. The solid-wood connection *a* should be about three-fourths of an inch wide at top and be beveled off to a point or line, as shown in the drawings.

It will be obvious that by use of my improved construction the bars may be made narrower and yet stiffer than the former long bars, and that a sieve made with the bars in ranks will be stiffer even if made of lighter material.

I claim—

1. In a slotted solid-wood sieve suitable for gas-purifiers, the combination of two or more sets or series of slots and bars secured and combined together by solid-wood connections and in the middle part of the sieve, substantially as described.

2. The beveled shape of the solid-wood connection *a* between the bars, substantially as described.

RICHARD G. HUNT.

Witnesses:

F. O. TREADWELL, Jr.,
M. B. ANDRUS.