

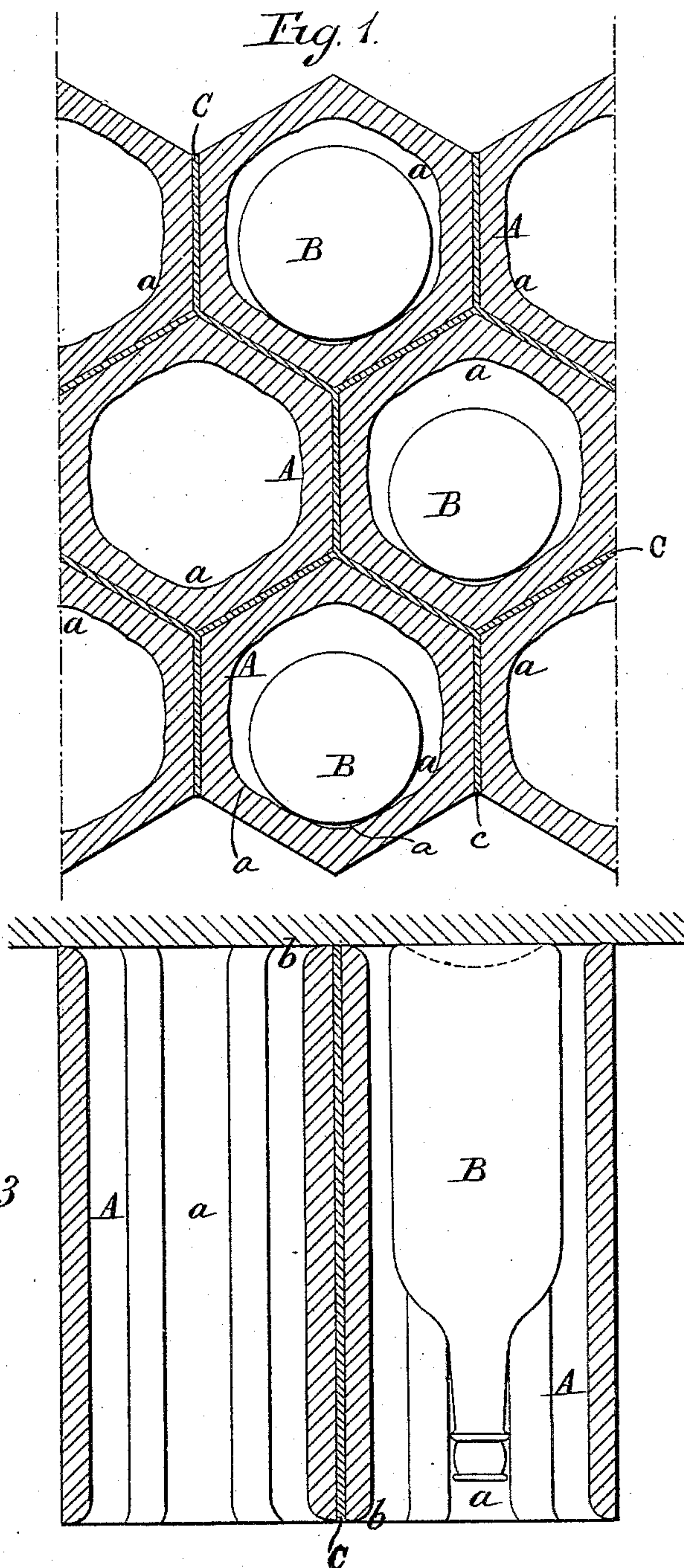
(No Model.)

2 Sheets—Sheet 1.

G. KING.
WINE BIN.

No. 401,175.

Patented Apr. 9, 1889.



Witnesses:
J. A. Rutherford.
Robert Smith

Inventor:
George King.
By *James L. Norris.*
att'y.

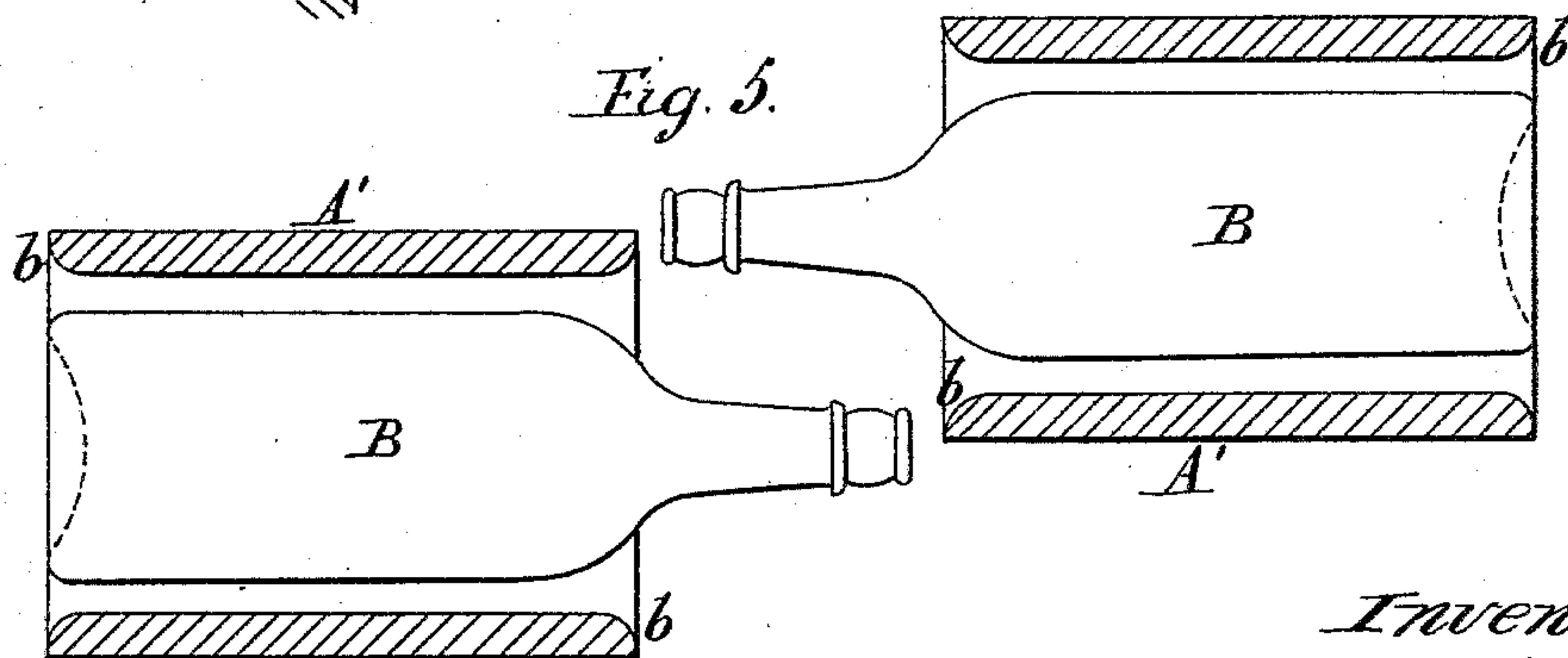
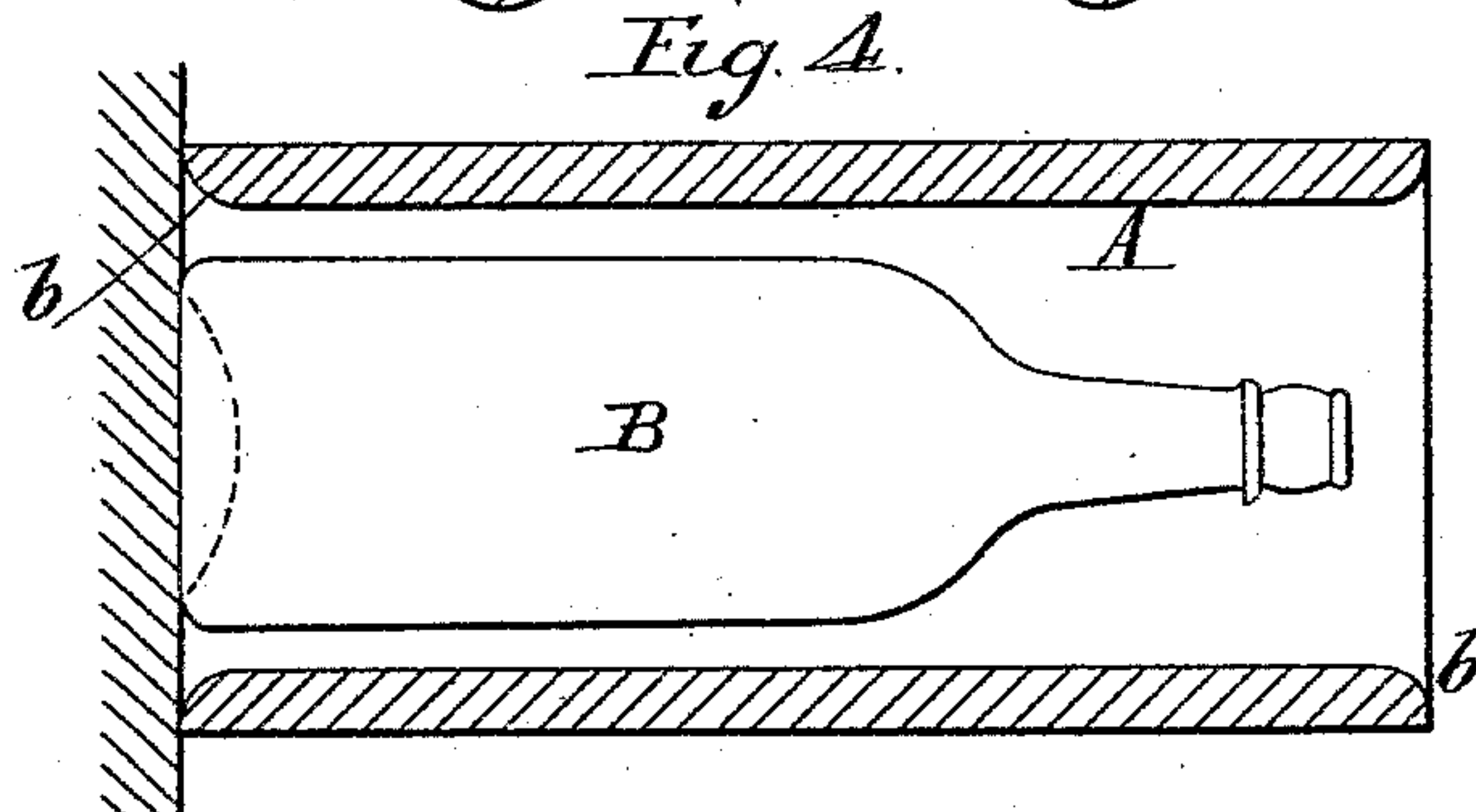
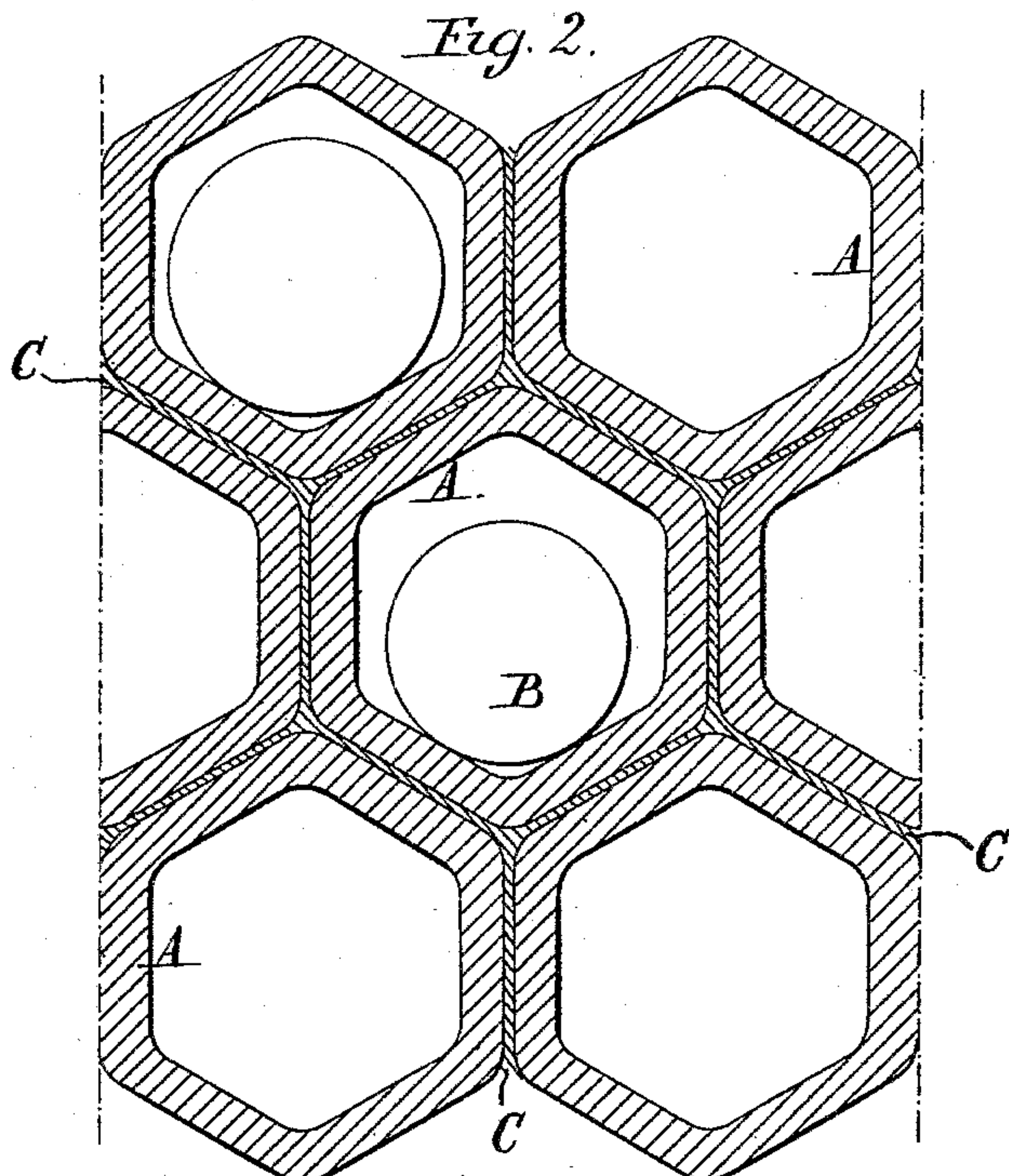
(No Model.)

2 Sheets—Sheet 2.

G. KING.
WINE BIN.

No. 401,175.

Patented Apr. 9, 1889.



Witnesses.

J. A. Rutherford.
Robert Emmett.

Inventor.
George King.
By James L. Norris.
Att'y.

UNITED STATES PATENT OFFICE.

GEORGE KING, OF EAST HADDON, COUNTY OF NORTHAMPTON, ASSIGNOR
OF TWO-THIRDS TO WILLIAM ARTHUR SMITH, OF WEEDON, AND GEORGE
KING, JR., OF EAST HADDON, ENGLAND.

WINE-BIN.

SPECIFICATION forming part of Letters Patent No. 401,175, dated April 9, 1889.

Application filed January 19, 1888. Serial No. 261,244. (No model.) Patented in England November 23, 1886, No. 15,295.

To all whom it may concern:

Be it known that I, GEORGE KING, a citizen of England, residing at East Haddon, in the county of Northampton, England, have invented a new and useful Improvement in Wine-Bins, (for which I have obtained a patent in Great Britain, dated November 23, 1886, No. 15,295,) of which the following is a specification.

10 This invention relates to a cheap and simple construction of bins for holding wine or other bottles, as I shall describe, referring to the accompanying drawings.

15 Figures 1 and 2 are vertical sections of parts of a bin according to this invention. Fig. 3 is a sectional plan of two of the cells. Fig. 4 is a plan of a single cell such as is shown in Fig. 2, and Fig. 5 is a sectional plan showing two short cells arranged for economizing space in packing large numbers of bottles.

20 The bin consists of a number of separate cells, A, externally hexagonal, built together with interposed mortar or cement, C, or merely piled together without mortar or cement. 25 Each of the cells A may have its interior circular, as shown in Fig. 1, preferably with slightly-hollowed grooves *a* in line with each angle of the hexagon, so that whatever way the cell is turned in the act of building up 30 there is always a hollow, *a*, at the under side to give steadiness to the bottle B when it is laid on its side in the cell; or, as shown in Fig. 2, each cell may be hexagonal inside as well as outside, with a slight rounding at each angle to give additional strength in those parts. 35 The lip of each cell is internally rounded, as indicated at *b*, so that no sharp edge is presented to the bottle as it is introduced into the cell, and this rounding *b* is made at each 40 end, so that the direction in which the cell is laid is indifferent.

The cells may be long enough to inclose the whole length of bottle, as shown in Figs. 3 and

4, or they may be short cells A', as shown in Fig. 5, each sufficient to inclose the body of 45 the bottle, leaving the neck projecting.

By arranging the short cells of one bin a little to the side of those of another, so that the necks of the bottles in the one range of the cells project into the intervals between 50 the necks of those in the other range, as shown in Fig. 5, space in stowage is economized.

The cells are preferably made of brick or such like material, which is cheap and is a bad conductor of heat; but they may be of earth- 55 enware or ceramic material, or of cement or artificial stone.

By the use of a bin of this kind each bottle is kept in a compartment by itself, protected against currents of air, moisture, or violent 60 changes of temperature, and the bottles of the lower tiers are not subjected to the load of those above, so that there is no liability to breakage.

Having thus described the nature of my in- 65 vention and the best means I know of carrying it out in practice, I claim—

1. A wine-bin consisting of a number of hexagonal cells of brick or other suitable material piled together, such cells adapted to con- 70 tain a bottle, substantially as described.

2. A hexagonal cell adapted to contain a bottle and having its interior surface provided with slightly-hollowed grooves *a* in line with each angle of the hexagon, substantially as 75 described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 4th day of January, A. D. 1888.

GEORGE KING.

Witnesses:

WM. C. WOODFORD,

JOSEPH H. NOLAN,

18 Market Square, Northampton, both Notary's Clerks.