

(No Model.)

G. KELLY.  
NON-CONDUCTING LINING.

No. 366,221.

Patented July 12, 1887.

FIG. 1.

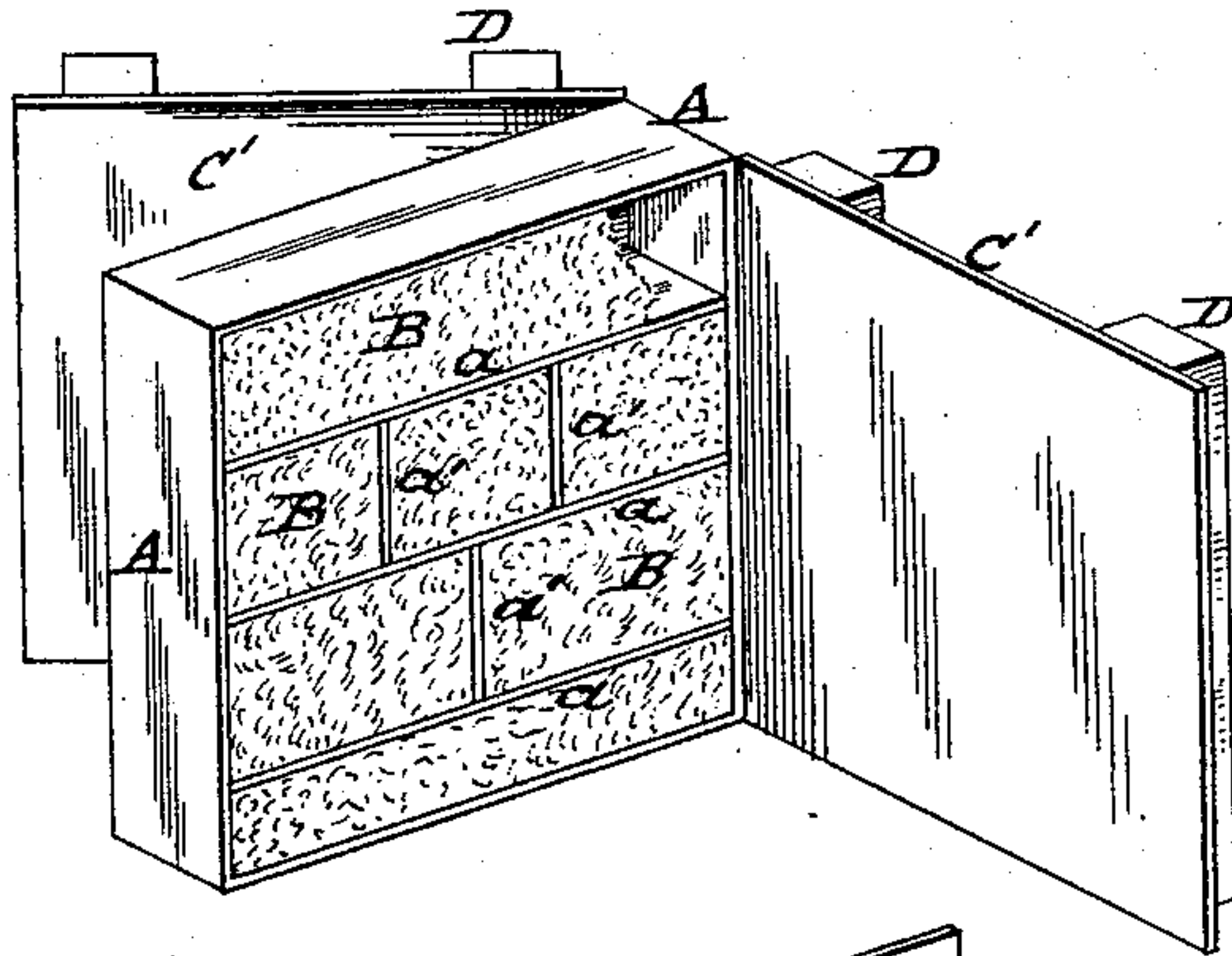


FIG. 2.

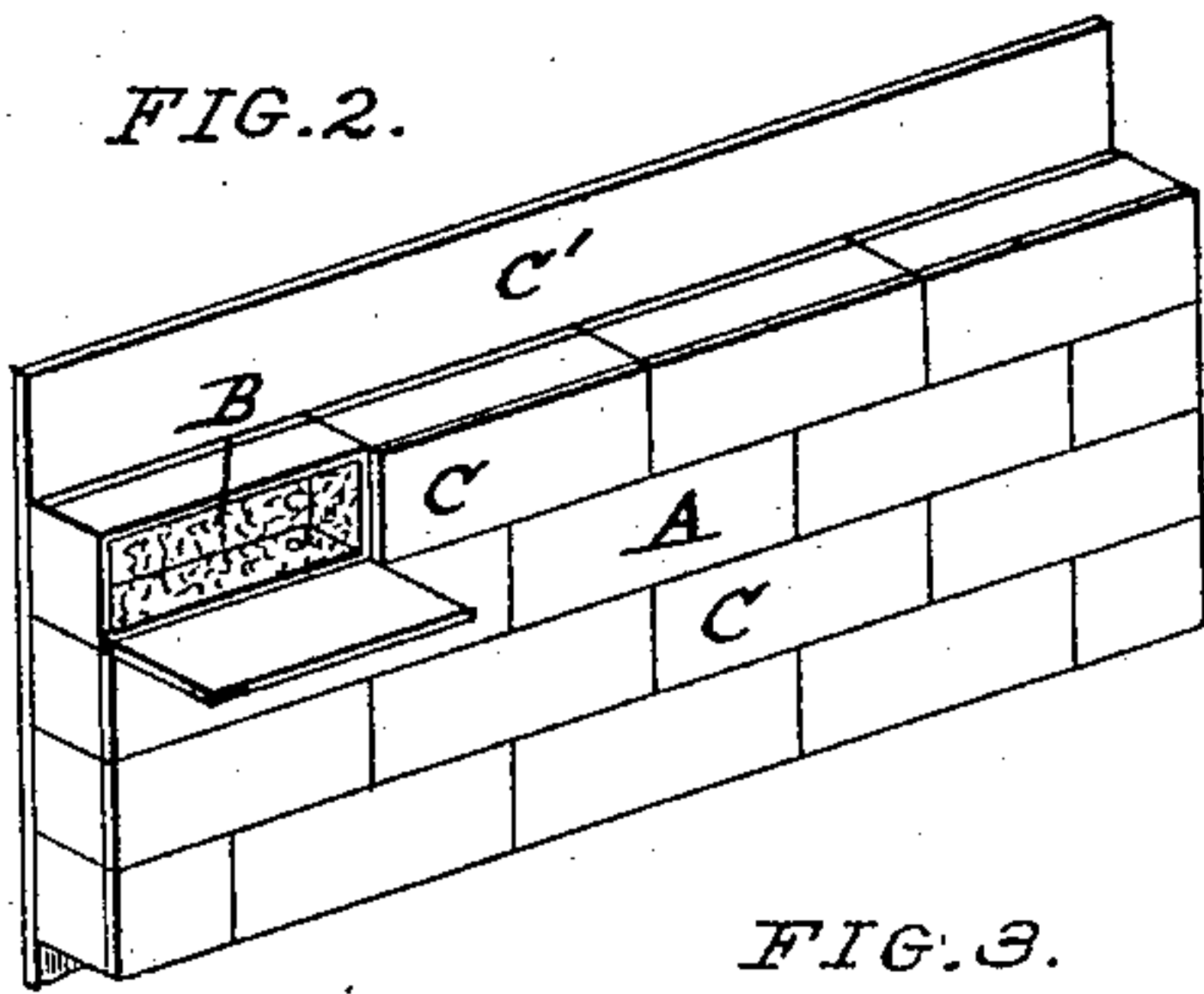


FIG. 3.

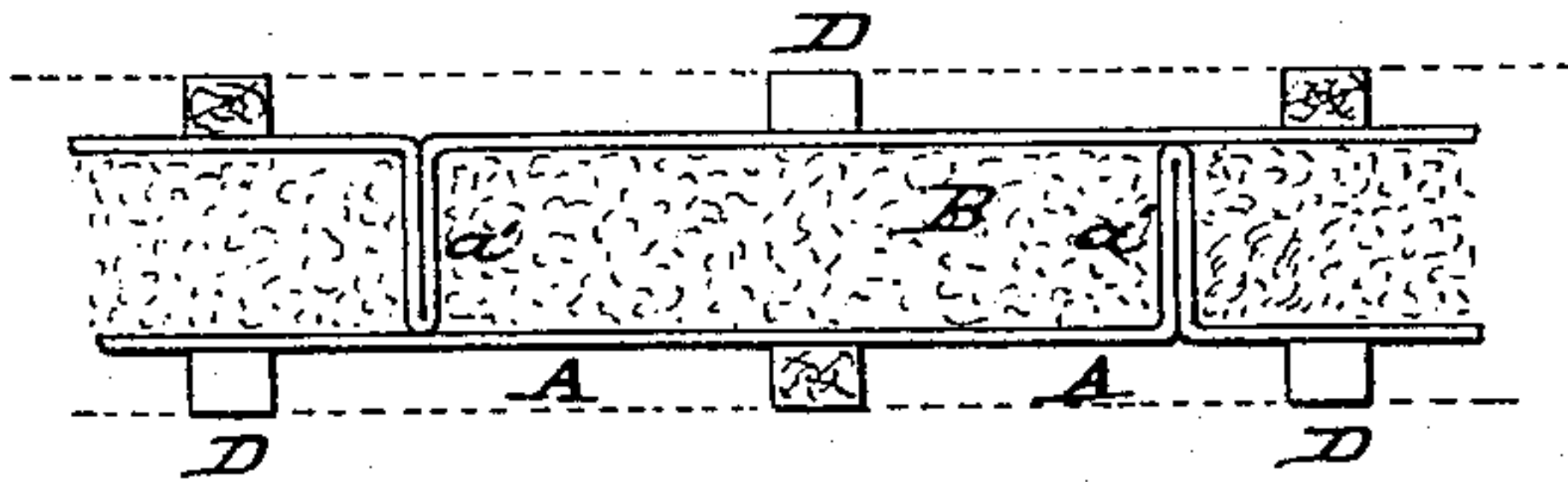
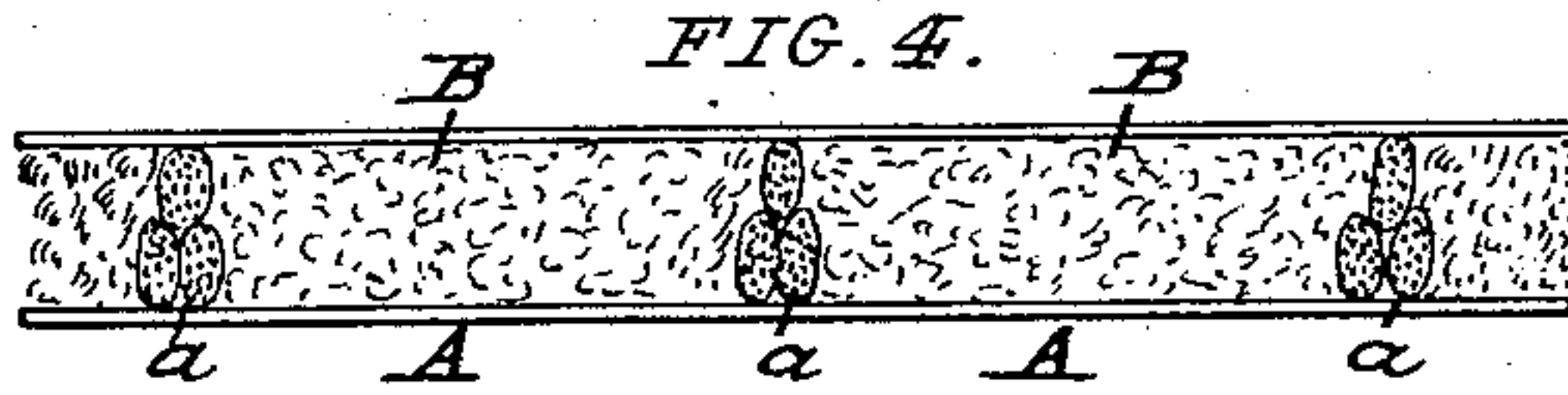


FIG. 4.



ATTEST:

*Geo H. Arthur*

*J. W. Harris*

INVENTOR:

*George Kelly*

by

*Robert Burns*

*Attorney.*



# UNITED STATES PATENT OFFICE.

GEORGE KELLY, OF CHICAGO, ILLINOIS.

## NON-CONDUCTING LINING.

SPECIFICATION forming part of Letters Patent No. 366,221, dated July 12, 1887.

Application filed August 23, 1886. Serial No. 211,692. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE KELLY, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Non-Conducting Linings or Fillings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to that class of linings, fillings, &c., employed to prevent the transmission of heat, cold, or sound through floors, walls, partitions, or other portions of houses, cars, &c.; and the object of the present improvement is to provide, as a new article of manufacture, a lining or filling slab or body in the form of a hollow casing inclosing a body of loose non-conducting material—such as mineral wool, wool-screenings, asbestos, or similar loose materials—and which has provisions to prevent the downward settling or impacting of such loose material in the lower part of the inclosing casing. I attain such object by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a lining or filling slab or body constructed in accordance with my invention, the parts being shown in a detached condition; Fig. 2, a perspective view of a portion of such slab or body, showing modified details of the same. Fig. 3 is a detail section illustrating the mode of forming the cell or pocket partitions in the inclosing sheets or walls of the slab or body, and Fig. 4 a detail section illustrating the use of asbestos or other rope for forming the cells or pockets of my improved slab or body.

Similar letters of reference indicate like parts in the several views.

As illustrated in the drawings, my improved slab or body consists in the use of partitions *a* throughout the casing *A*, to form superimposed cells or pockets *B*, to receive the loose non-conducting material, which may be asbestos, mineral wool, wool-screenings, loose hair, cotton-seed hulls, dry paper-pulp, or other loose non-conducting material. The partitions *a* are arranged in a horizontal position, and

as so arranged will answer most purposes; but where the casing is applied to uses where there is a tendency of the material to pack horizontally I employ in connection with the horizontal partitions *a* vertical partitions *a'*, to overcome such tendency, in manner indicated in Fig. 1.

While for some purposes the above-described method of forming the superimposed pockets *B* is to be preferred, yet for some particular applications I prefer to form the said pockets by means of a series of separate boxes, *C*, for containing the material, and secure them together in place upon a backing strip or sheet, *C'*, by means of cement, clips, or other analogous means, as illustrated in Fig. 2. The casing may be provided on its faces with cleats or projecting strips *D*, so as to hold it away from the wall or surface to which it is applied, in order to form a "dead-air" space between the parts in the usual well-known manner.

In the manufacture of the casing any suitable material may be employed, depending solely upon the particular use to which it is to be applied. For general purposes, where fire-proofing is not required, it may be formed of wood, ordinary paper-board, &c.; and where a fire-proof construction is desired, it is preferred to form the casing and partitions of asbestos board, or like fire-proof non-conducting material, and as a filling for such construction it is preferred to use fibrous asbestos or mineral wool. The partitions *a a'* may be formed of separate strips, as indicated in Fig. 1; or they may be formed in the shape of ribs integral with the walls by folding such wall closely upon itself, as indicated in Fig. 3. The folds to form the partitions, as above described, may be made in both sheets, as shown, or solely in one sheet, as desired or found most convenient. In instances where the casing is required to be bent to a curved or other irregular shape, I form the longitudinal partitions *a* of asbestos rope, or rope covered with asbestos, or ordinary rope, as indicated in Fig. 4, so as to permit of the ready and effective bending of the casing to the required shape.

I am aware that prior to my invention the walls of cars, refrigerators, and like articles have been formed with partitions and the interstices filled with non-conducting material;

also, that fire-proof shutters have been made with a sheet of corrugated sheet-iron having its corrugations vertically arranged, secured to a flat sheet, with the vertical cells thus  
5 formed filled with a non-conducting material. I therefore do not claim such construction, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

10 1. As an improved article of manufacture, a non-conducting filling or lining slab or body, consisting of a casing, A, formed into a series of vertical or superimposed cells or pockets, B, filled with loose non-conducting material,  
15 for the purpose set forth.

2. As an improved article of manufacture, a non-conducting filling or lining slab, consisting of a casing, A, formed into a series of superimposed cells or pockets filled with loose

non-conducting material, the partitions forming such cells being made integral with the walls by folding the material of the same closely upon itself, as described, and for the purpose set forth. 20

3. A non-conducting slab or body complete 25 and ready for use, composed of a casing or shell, A, having a series of horizontal partitions, *a*, and vertical partitions *a'*, and containing a body of non-conducting material, as described, and for the purpose set forth. 30

In testimony whereof witness my hand this 16th day of August, 1886, at Chicago, Cook county, Illinois.

GEORGE KELLY.

In presence of—

ROBERT BURNS,  
J. W. HARRIS.