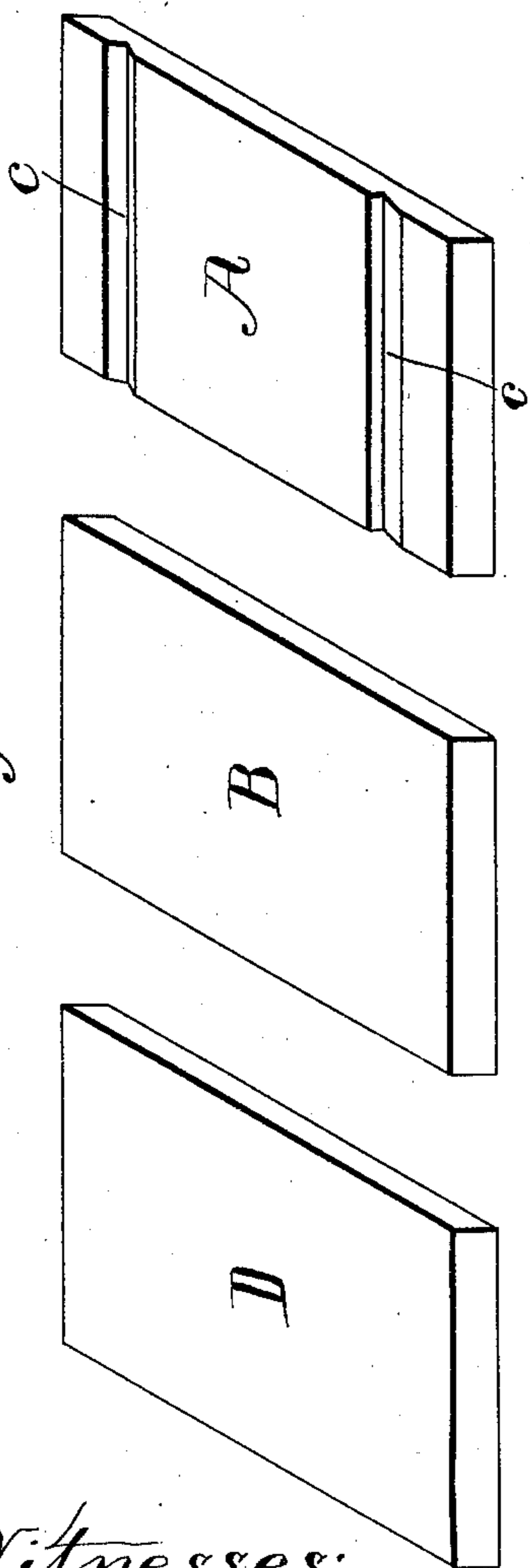


*G. W. Smith,  
Drain Tile.*

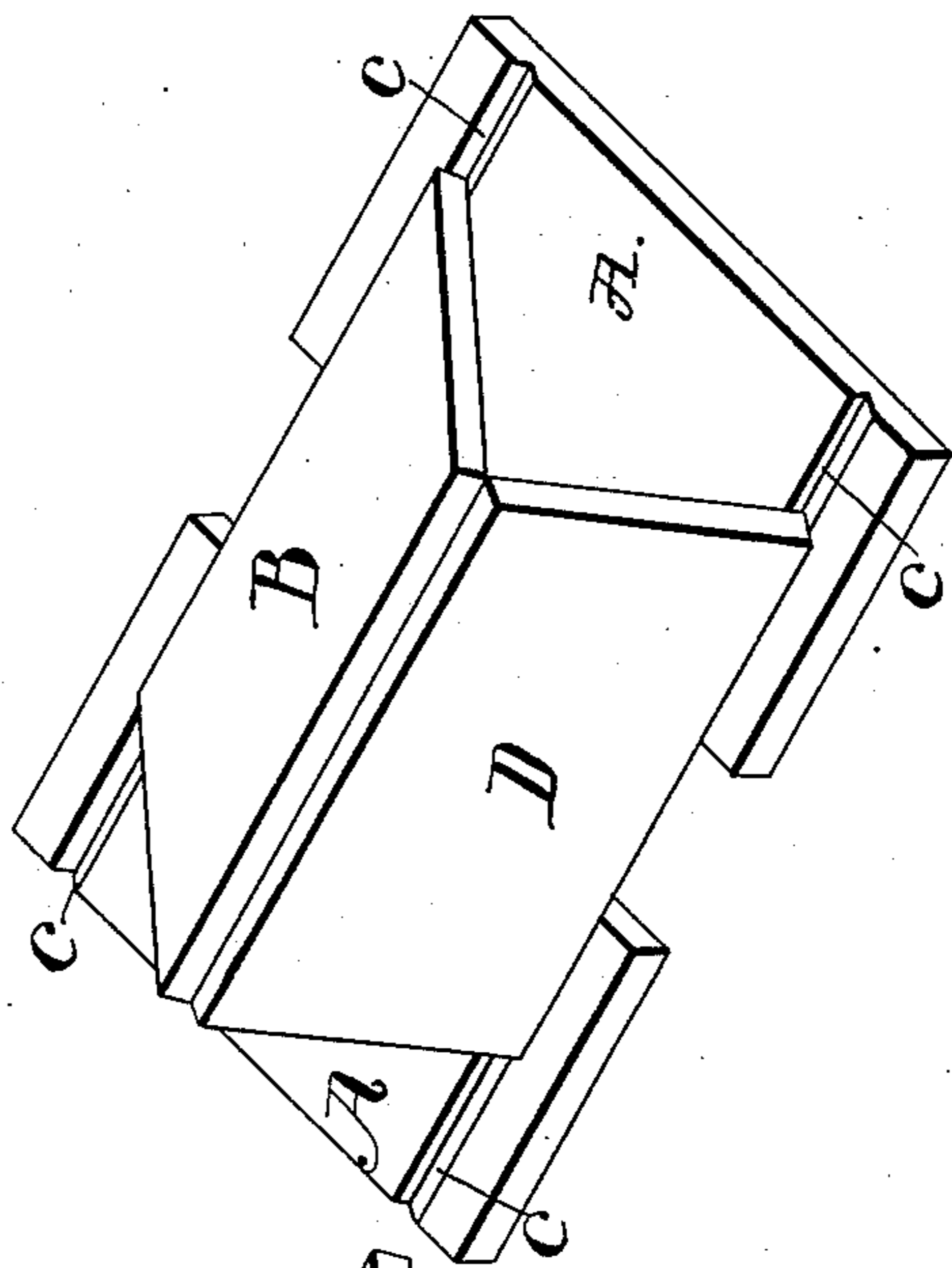
*N<sup>o</sup> 41,542.*

*Patented Feb. 9, 1864.*

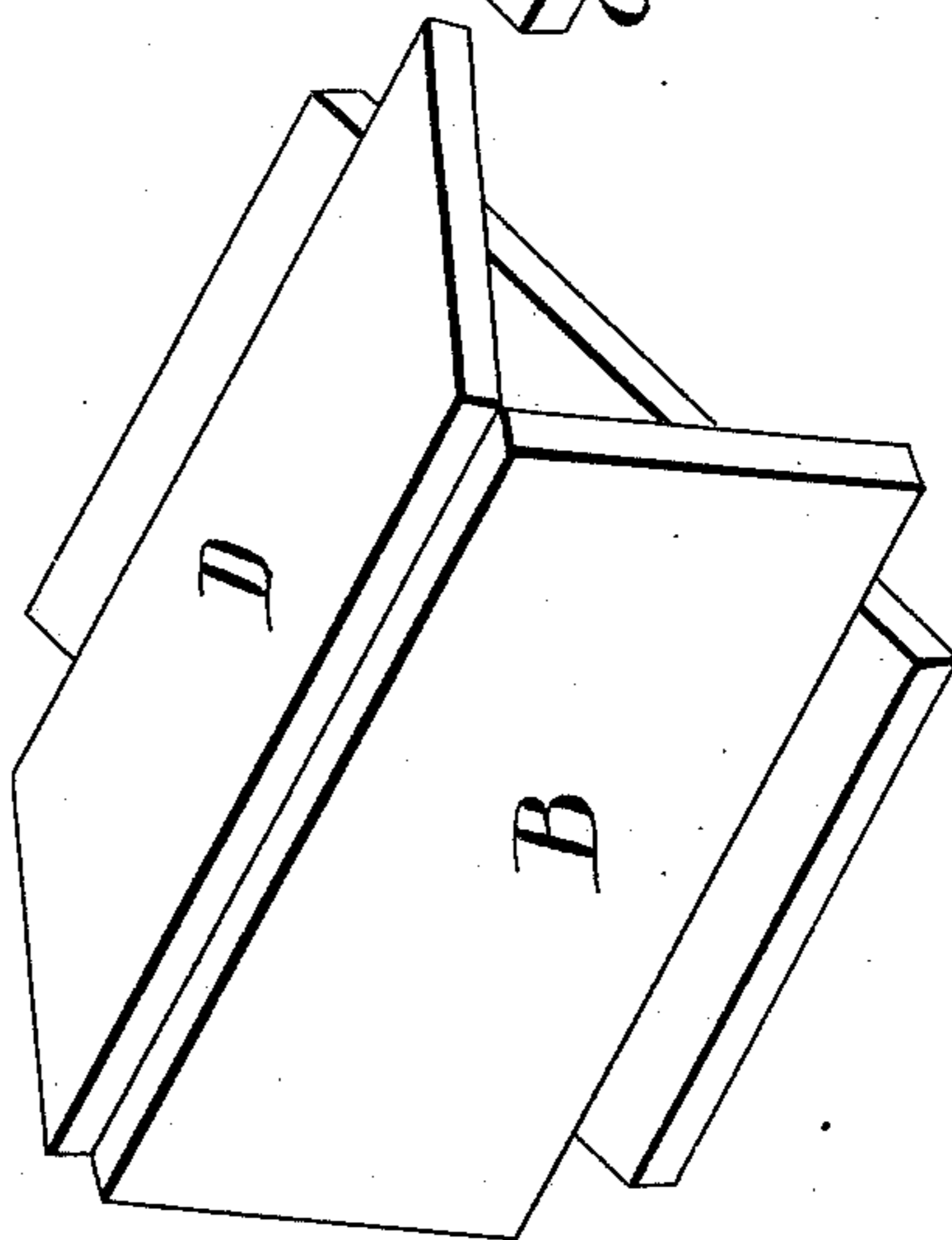
*Fig: 1.*



*Fig: 3.*



*Fig: 2.*



*Witnesses;  
Charles B Helfenstein  
Edward Brown*

*Inventor;  
George W Smith*

# UNITED STATES PATENT OFFICE.

GEORGE W. SMITH, OF SPRINGFIELD, BURLINGTON COUNTY, NEW JERSEY.

## IMPROVEMENT IN DRAINS.

Specification forming part of Letters Patent No. 41,542, dated February 9, 1864.

*To all whom it may concern :*

Be it known that I, GEORGE W. SMITH, of Springfield township, Burlington county, State of New Jersey, have invented a new and useful Improvement in the Construction of Drains for Agricultural and other Purposes; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a view of the detached pieces or slabs, and Fig. 2 the drain-pieces put together; Fig. 3, the mode of laying the drain.

I manufacture my improved drain by forming drain-pieces or slabs out of slate or tile of flat plates like A with grooves C C near each edge of the plate on the upper side. Into these grooves two pieces, B and D, are inserted and inclined so as to support each other, as shown in Fig. 2. The weight of the pieces B and D alone, or with the incumbent

earth, secures them in their place permanently, as shown in Fig. 2. The advantage of this improvement is that slate, stone, or other similar material not heretofore used for draining purposes can be employed and a better drain can be made and drains can often be made at much less cost. The drain may be laid, as shown in Fig. 3, leaving open spaces for the entrance of the water, if desired.

Having thus described my improvement, what I claim as my invention, and desire to secure by Letters Patent as a new article of manufacture, is—

The combination of the bottom drain-plates, or slabs A with the grooves C C and the two inclined plates or slabs B D, constructed and put together substantially as described.

GEORGE W. SMITH.

Witnesses:

CHAS. B. HELFENSTEIN,  
JAMES McCABEN.