

(No Model.)

J. J. BURK.

METHOD OF CORRUGATING WOOD.

No. 266,763.

Patented Oct. 31, 1882.

Fig. 1

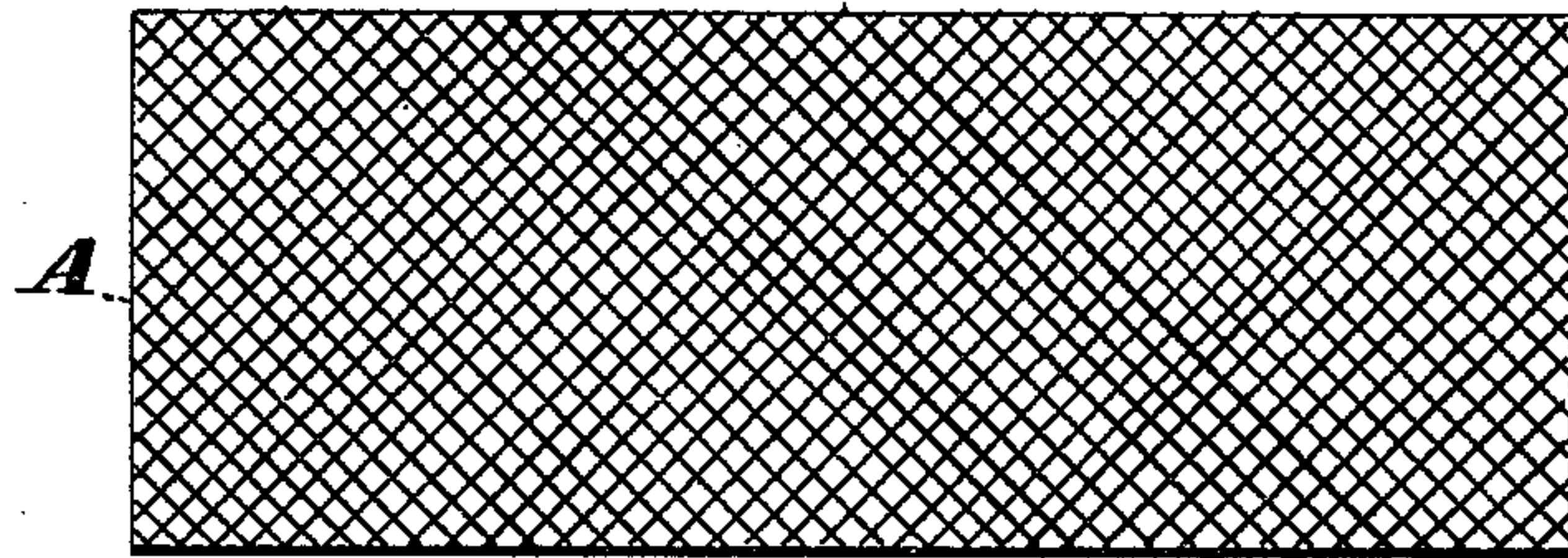


Fig. 2

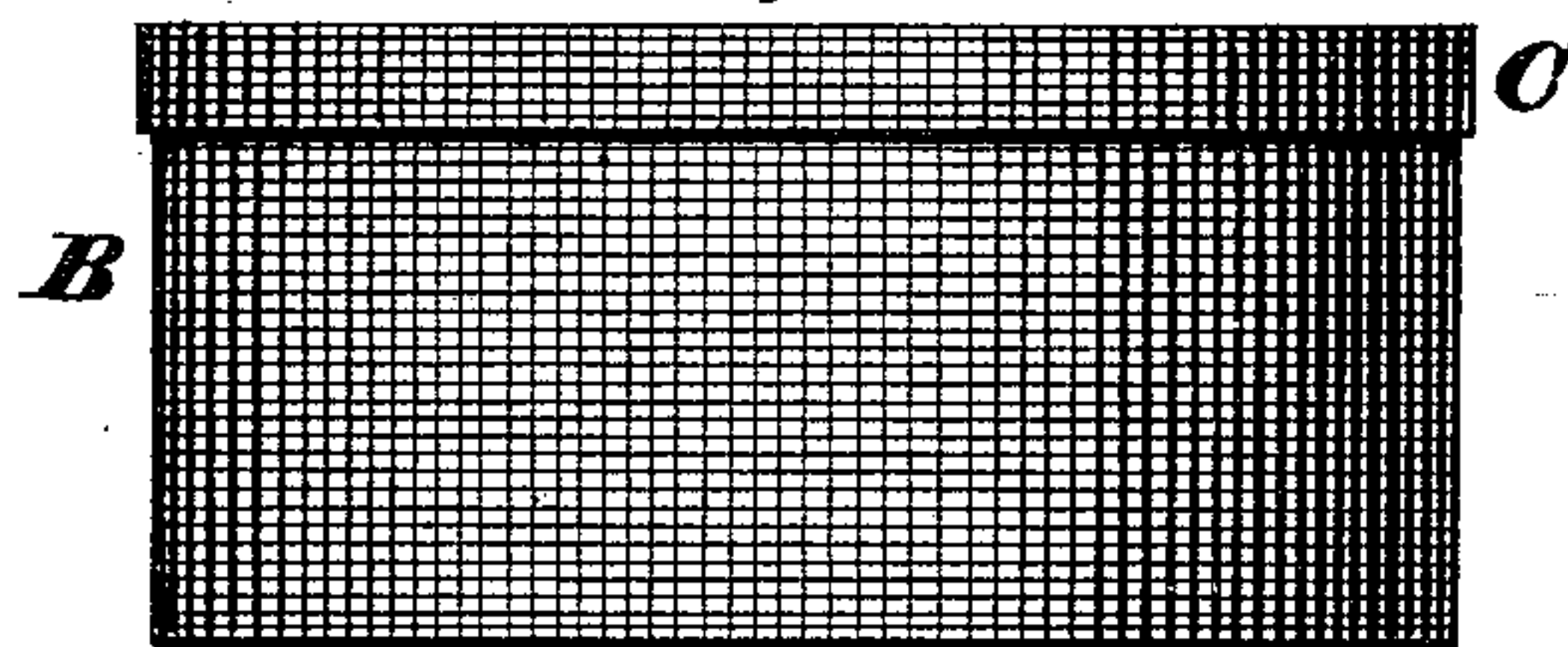


Fig. 3

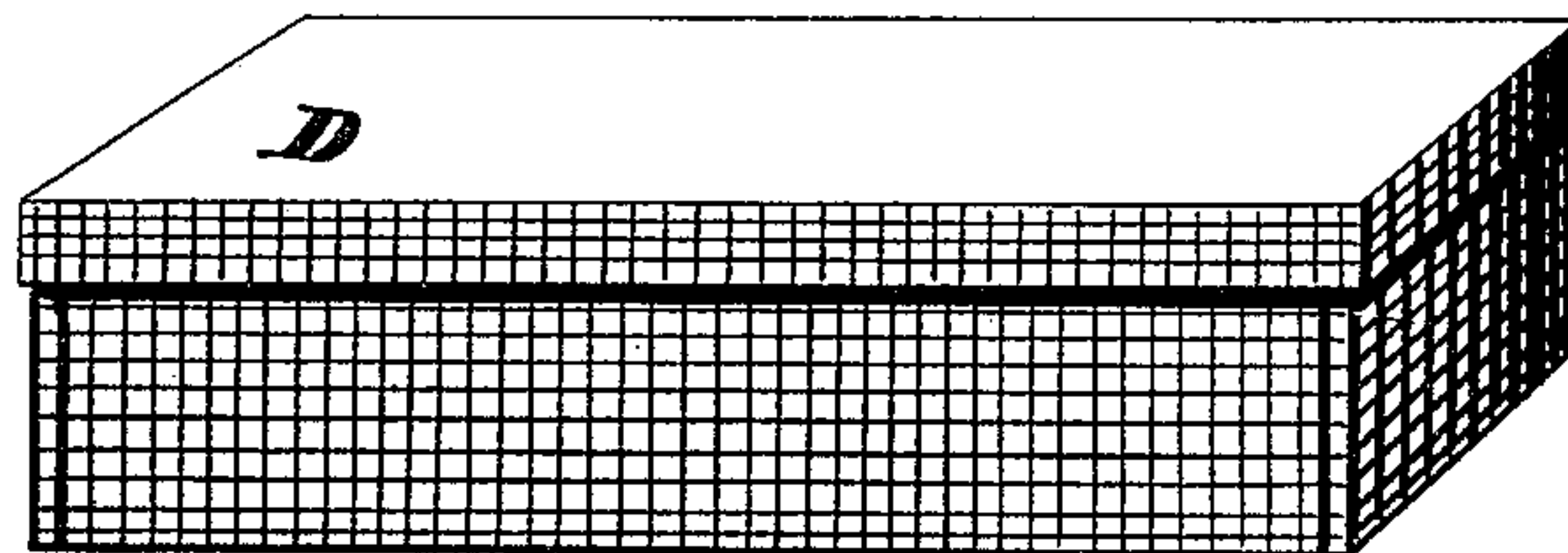


Fig. 4

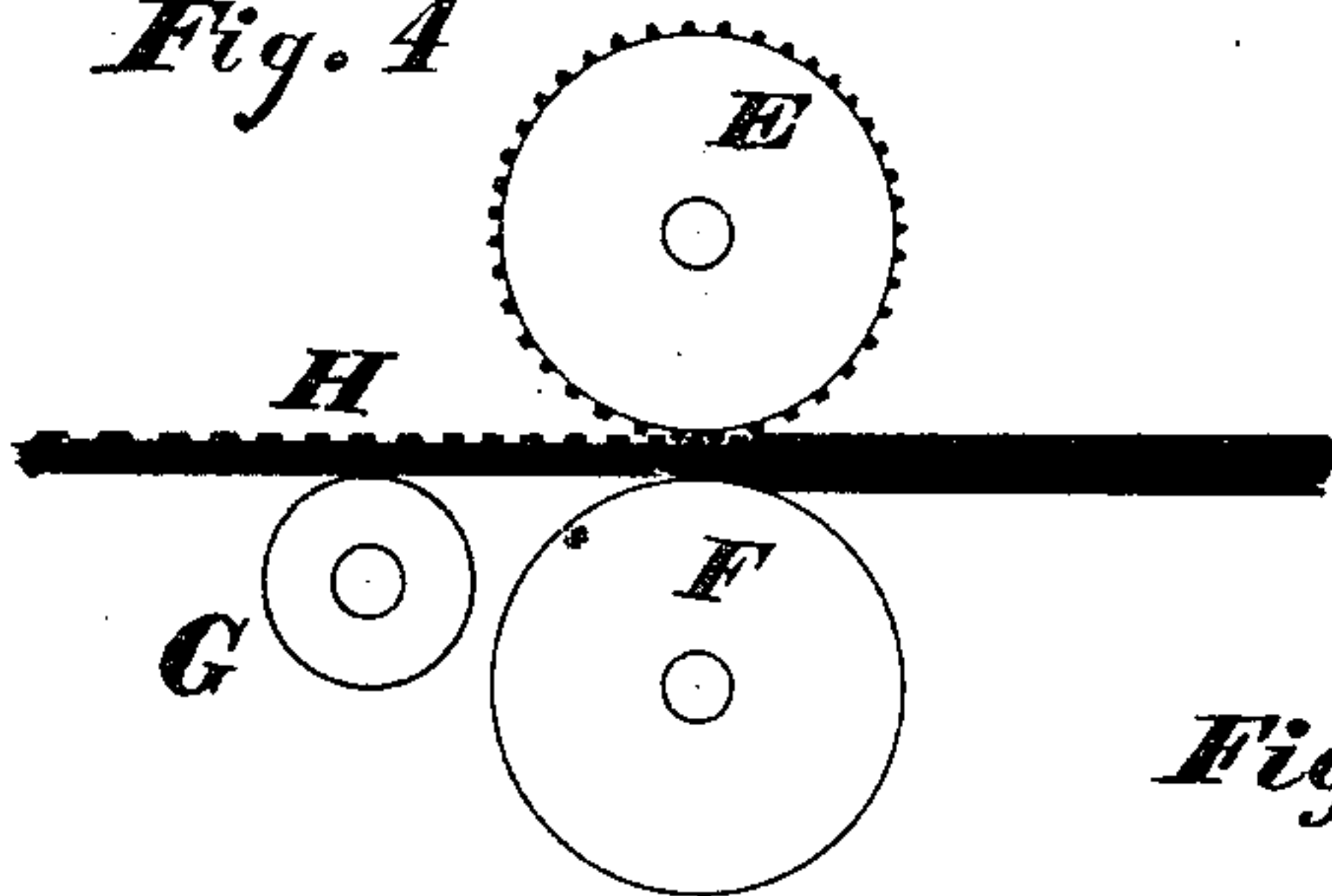


Fig. 5

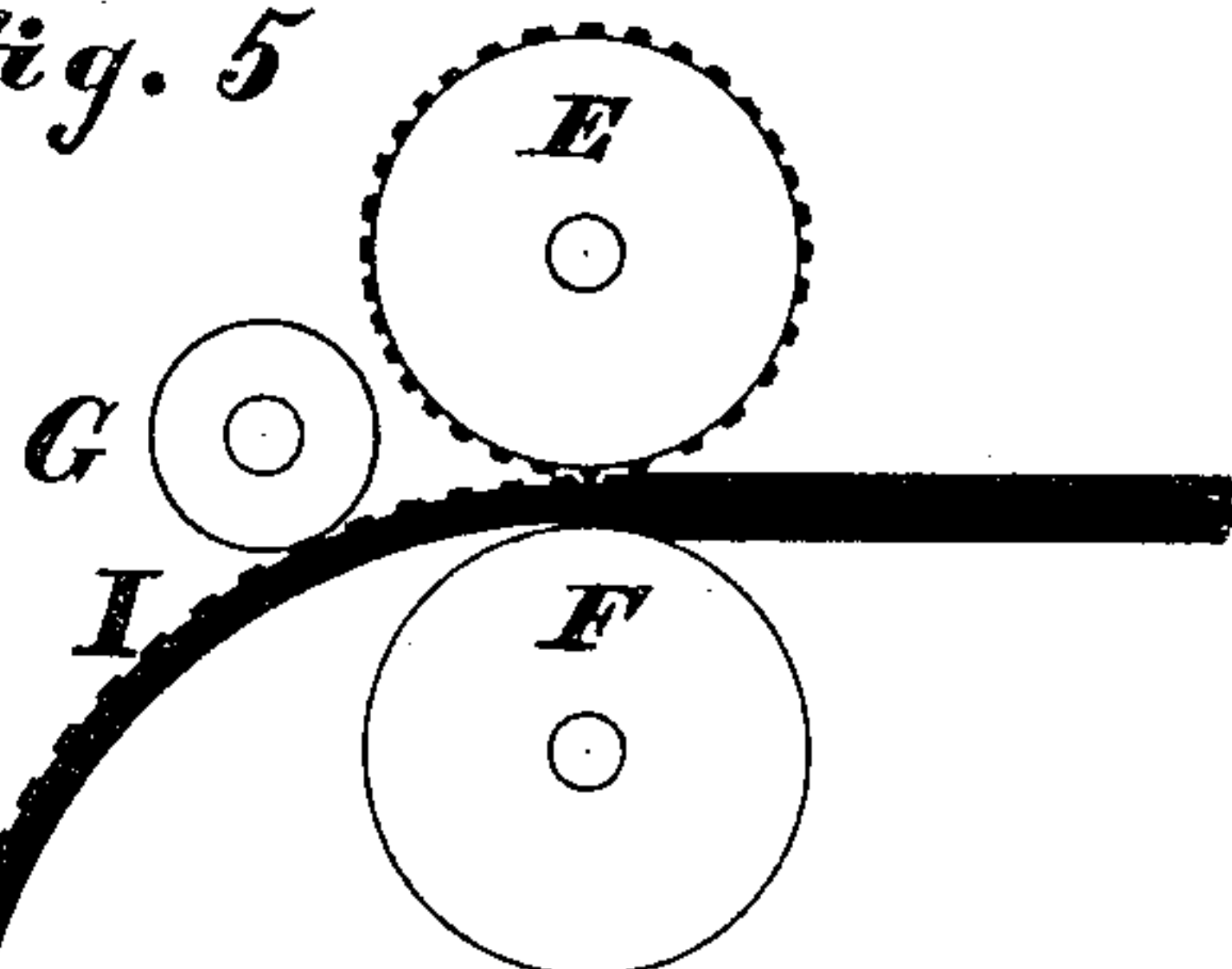
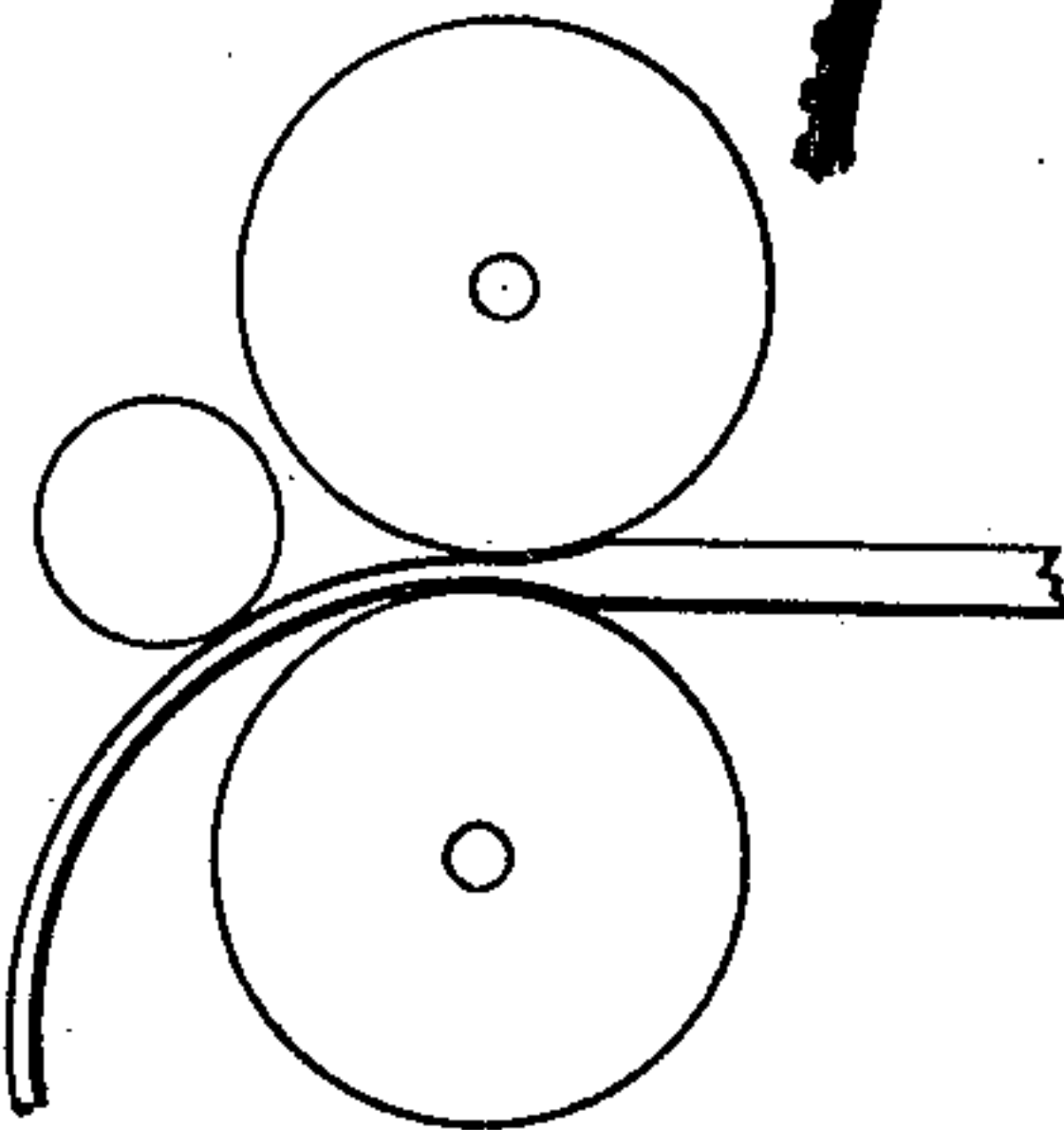


Fig. 6



Witnesses

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UNITED STATES PATENT OFFICE.

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METHOD OF CORRUGATING WOOD.

SPECIFICATION forming part of Letters Patent No. 266,763, dated October 31, 1882.

Application filed January 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. BURK, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in the Treatment of Wood for the Manufacture of Cheese-Boxes or other Purposes, of which the following is a specification.

My invention relates to the treatment of boards or thin sheets of wood for boxes or other purposes without the necessity of steaming or boiling, whereby it may be easily bent or curved to the desired form while in a dry state without any danger of breaking, and will retain its form or shape when so bent, and so that its appearance will be greatly improved, all of which will be more clearly hereinafter shown by reference to the accompanying drawings, in which—

Figure 1 represents a face view of a board treated according to my invention. Fig. 2 is a side elevation of a cheese or other round box made therefrom. Fig. 3 is a perspective view of a square-cornered box made from wood so treated, and Figs. 4 and 5 are diagrams showing the manner in which the wood is treated for either round or straight work. Fig. 6 is a modification.

It is well known that dry wood cannot be formed sufficiently in the ordinary way without danger of breaking, and that when so formed it will spring back out of the required shape as soon as it is released from the force required to form it; and it is also well known that such wood when steamed or boiled and formed to the required shape will spring back out of shape unless the force required to form it is retained until the wood becomes perfectly dry, thereby causing a delay and expense, which my invention is designed to avoid.

In preparing the wood I subject it to both a compressing and corrugating force—the compressing force for the purpose of bringing the fibers of the wood closer together and causing it to retain the shape in which it is formed, and the corrugating force for the purpose of slightly increasing the length of one side of the wood, and also improving its appearance.

A pair of rollers, E F, shown in Figs. 4 and 5, and geared together in any well-known way, are well adapted for preparing the wood, one of the rollers, E, being corrugated and the other, F, being a smooth or plain roller; but for some purposes both rollers may be corrugated. The

wood while being thus treated should be in a perfectly-dry state.

In Fig. 4, H represents a piece of wood as being compressed and corrugated on one side without being bent as it passes between the rollers E F; and in Fig. 5 a slip of wood, I, is represented as being compressed, corrugated, and bent at the same time as it passes through the rollers.

It will be seen that the corrugations in the roller E will by compressing and corrugating the wood cause that side to be slightly increased in length, and thereby cause it to curve as shown, and that if it does not bend sufficiently by this operation an adjustable roller, G, may be adjusted so as to press on and further increase the bending of the same. In compressing and bending wood in this way the necessity for steaming is avoided.

In preparing pieces of wood by this process which do not require bending, the roller G may be adjusted so as to press against the other side of the wood, as shown in Fig. 4; or the same result may be effected by corrugating both sides of the wood at once, in which case both rollers E and F should be corrugated.

In the drawing Fig. 1 I have shown a suitable arrangement of the corrugated lines; but they may be arranged as shown in Figs. 2 and 3, or any other arrangement of lines or their equivalent for effecting the purpose may be used. In Fig. 2 an ordinary round cheese-box made from wood so prepared is shown, B being the body of the same, and C the cover.

In Fig. 6 I have shown a modified arrangement of the rollers, in both of which the faces are plain, so that the wood is compressed and formed at the same time without being corrugated. The compressing of the wood either way allows it to be formed while in a perfectly-dry state without breaking, and when so formed it retains its shape.

I claim—

The herein-described mode of treating wood for boxes or other purposes, consisting in passing it in a dry state through rollers, one of which is corrugated and the other smooth, whereby the wood is compressed, corrugated, and bent or formed into a cylinder at the same time.

JOHN J. BURK.

Witnesses:

JAMES SANGSTER,
HUGH SANGSTER.