

(No Model.)

G. H. FORSTER.
BARREL.

No. 481,350.

Patented Aug. 23, 1892.

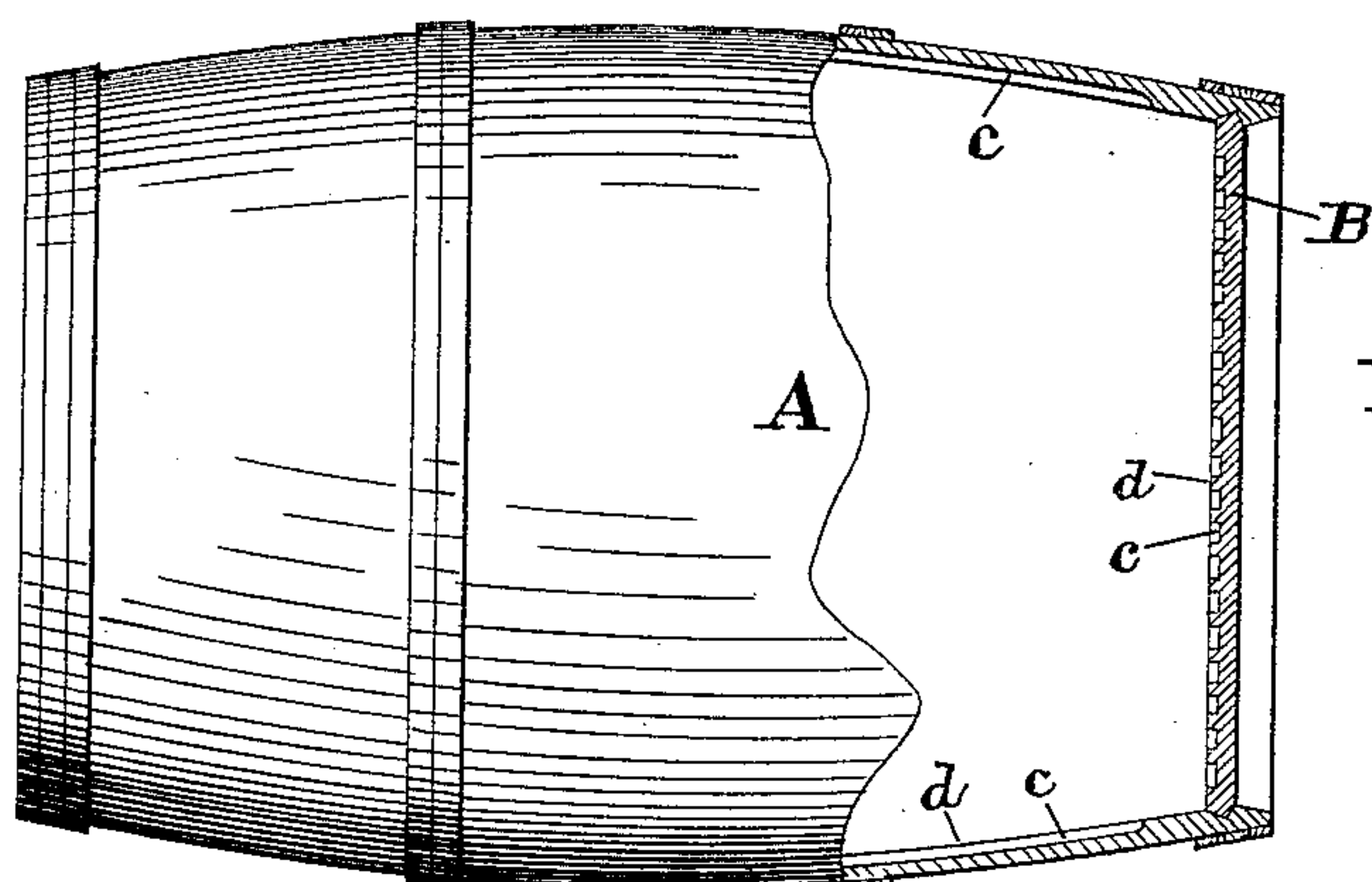


Fig. 1.

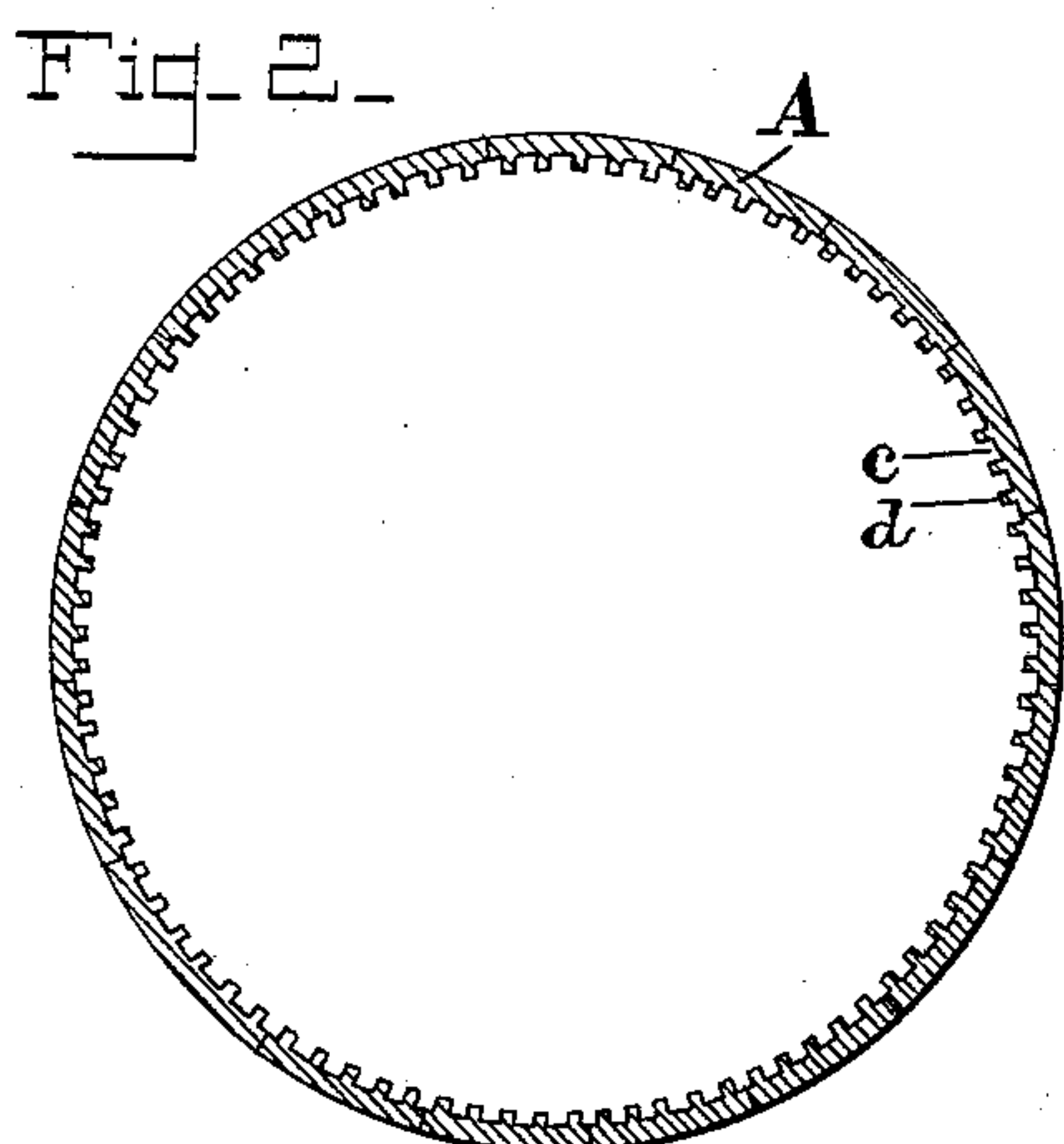


Fig. 2.

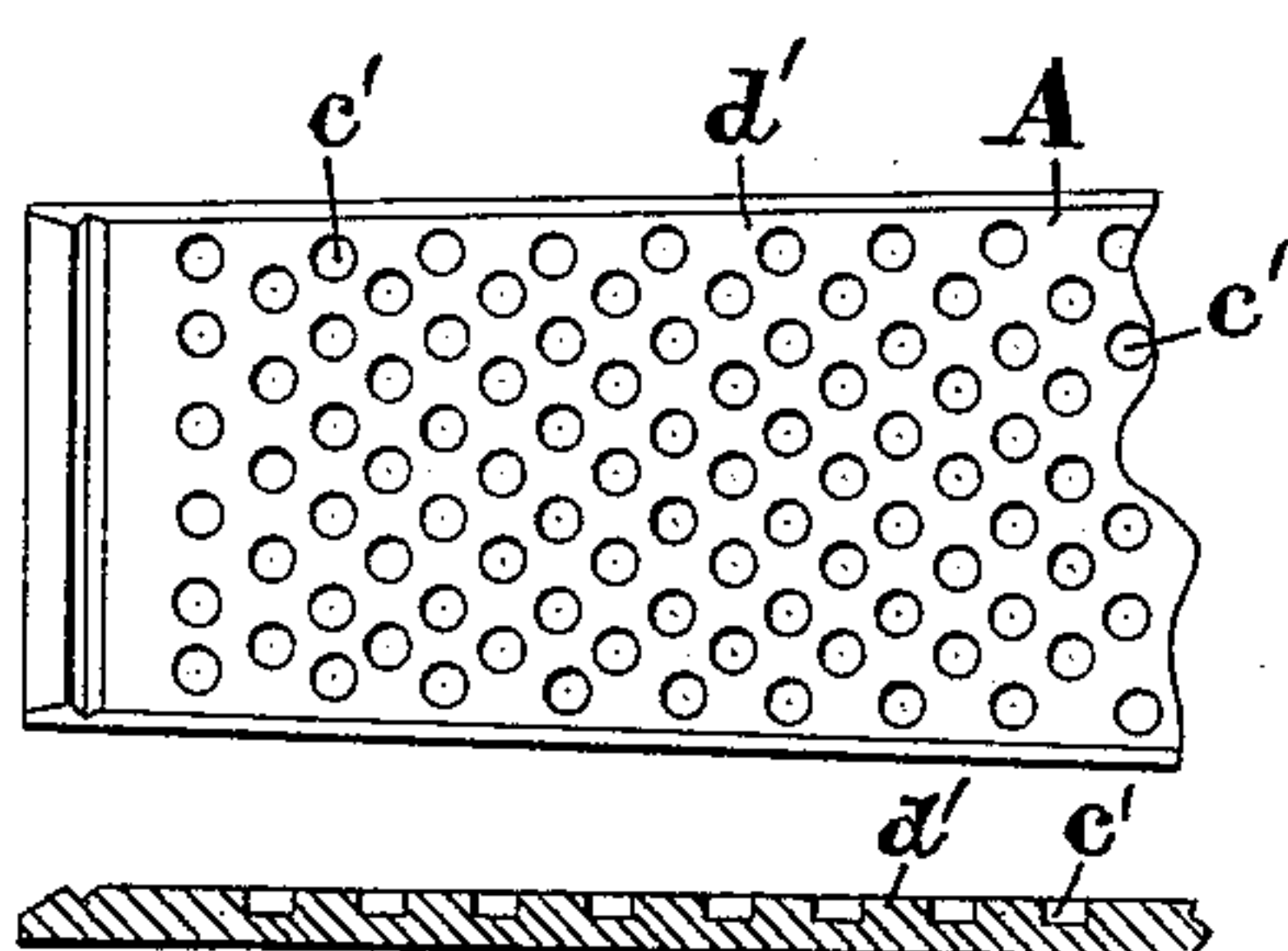


Fig. 4.

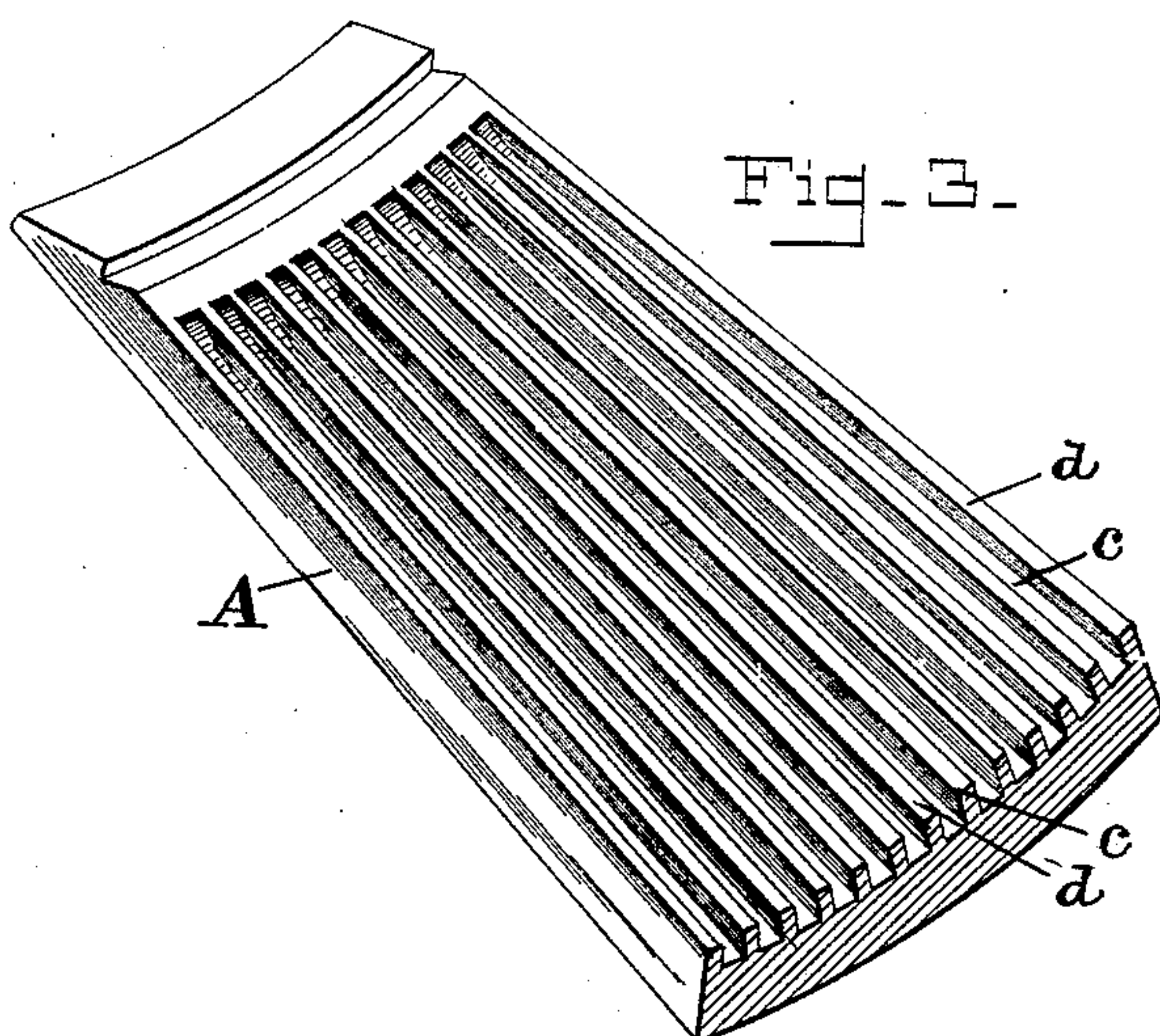


Fig. 3.

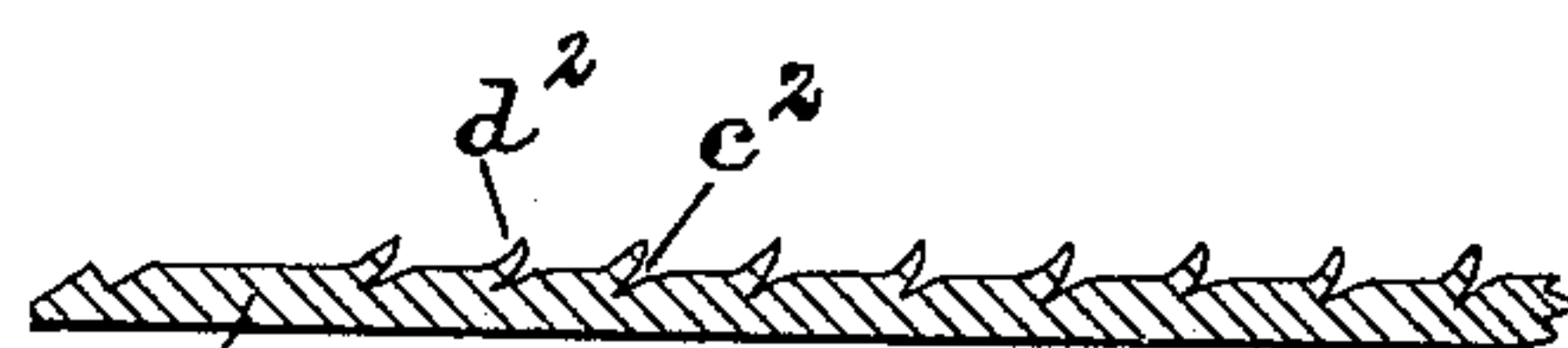


Fig. 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE HENRY FORSTER, OF BALTIMORE, MARYLAND.

BARREL.

SPECIFICATION forming part of Letters Patent No. 481,350, dated August 23, 1892.

Application filed November 16, 1891. Serial No. 412,024. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY FORSTER, a citizen of the United States, residing at Baltimore, Maryland, have invented certain new and useful Improvements in Barrels, of which the following is a specification.

This invention relates to an improvement in barrels and casks for storing liquor to be aged.

One object of the invention is to provide that barrels of a given size may have an increased interior surface for contact with the liquor, and another object is to provide barrels with an interior surface so prepared or constructed as to be more readily carbonized or charred and to admit of satisfactory carbonization by the introduction into the barrel of hot air.

The invention is illustrated in the drawings, in which—

Figure 1 is a view of a barrel, partly in section at one end, to which my improvement is applied. Fig. 2 is a cross-section of a barrel, showing one form of the interior surface.

Fig. 3 is a view, on a larger scale, of a barrel-stave in section, showing one form of my improvement. Fig. 4 shows two views of part of a barrel-stave having another form of the improvement. Fig. 5 is a section of part of a barrel-stave, illustrating still another form for carrying out the invention.

The barrel staves and heads, either or both, before being set up to form the barrel are provided on the inner side with a grooved, indented, or hackled surface, produced in any suitable manner, that will increase the area of the wood surface with which the liquor will be in contact and facilitate carbonization. It is immaterial as to the precise shape or form of this surface. The essential thing is to increase the area of the contact-surface and facilitate carbonization.

The drawings show three modes of carrying out my invention, either one of which gives good results; but it will be understood that still other modes may be used, according to the judgment or skill of the barrel-maker.

In Figs. 1, 2, and 3 the increased contact-

surface is produced by grooves and an inward-projecting tongue or rib between every two grooves.

The letter A designates the stave, and B the head, of an ordinary barrel. The inner surface has depressed grooves *c*, and tongues, ribs, or equivalent projections *d* between the grooves. A barrel will thus have a serrated inner surface, which will afford a much greater area of wood for the contact of the liquor. The grooves will be in such close proximity as to make the tongues between them so thin that they will readily char through. Thus the nature of this serrated wood surface is such that its thin tongues, ribs, or projections *d* will be easily carbonized or charred by the action of heated air when such air is introduced into the barrel. After the barrel has been carbonized and filled with liquor the depressions and projections comprise the area for contact of liquor, and it is obvious that such area is much greater than the inner smooth surface of ordinary barrels.

This barrel is especially designed for storing and aging whisky, brandy, and such liquors. It provides simply for hastening the process of aging, developing, and improving whisky or like liquors by increasing and enlarging the interior carbonized surface of the barrel.

Fig. 4 illustrates another manner of increasing the inner area of the barrel's surface. Here the indentations or depressions are in the form of pits, recesses, or gouged-out spots *c'* with the raised web part *d'* between.

In Fig. 5 another form is shown. Here the barrel-stave is hackled by a chopping-tool to produce indentations or depressions *c''* and projecting tongues *d''*.

It will be seen that the invention is not limited to any particular manner or any precise form of indentations and projections on the inner surface of the barrel.

It is obvious that the tongues and grooves may be formed on the interior surface of the barrel in any desired way—for instance, by securing strips of wood to the said surface, the spaces between the strips forming grooves.

I have employed the word "indentations" to designate any one of the different forms shown. They may be formed by grooving, pitting, or hackling, or in any other suitable
5 way, but so formed that there is left standing between them thin projecting wood parts, such as the tongues d d^2 or webs d' .

Having thus described my invention, what I claim as new, and desire to secure by Letters
10 Patent, is—

1. A barrel having its inside contact-surface provided with indentations so formed as

to leave between them thin projecting wood parts, for the purpose described.

2. A barrel having its inner surface provided with alternating tongues and grooves, for the purpose set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

G. HENRY FORSTER.

Witnesses:

JNO. T. MADDOX,
FRANK P. DAVIS.