

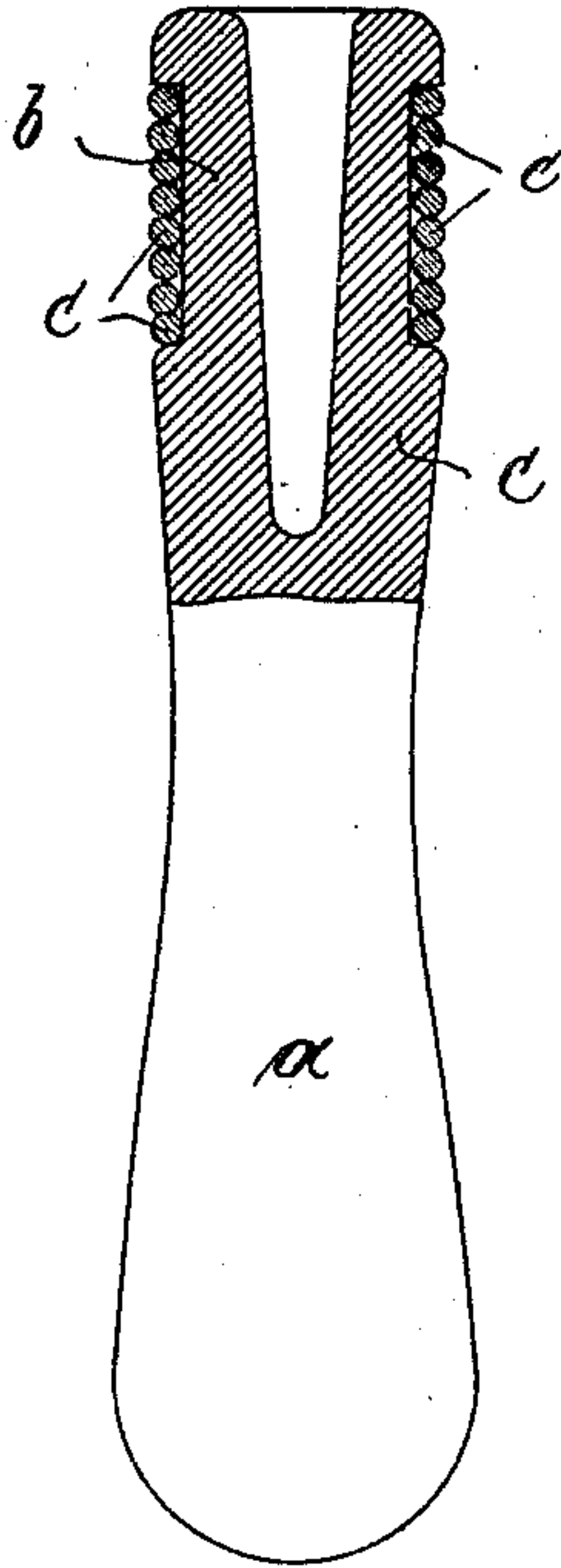
No. 706,378.

Patented Aug. 5, 1902.

P. BENDER.
FILE HANDLE.

(Application filed May 1, 1902.)

(No Model.)



Witnesses:
Arthur Scholz.
Paul Wollenberg.

Inventor:
Philip Bender
by *Handwritten Signature*
Attorney

UNITED STATES PATENT OFFICE.

PHILIPP BENDER, OF DOTZHEIM, NEAR WIESBADEN, GERMANY, ASSIGNOR
TO FIRM CARL BENDER I, OF DOTZHEIM, NEAR WIESBADEN, GERMANY.

FILE-HANDLE.

SPECIFICATION forming part of Letters Patent No. 706,378, dated August 5, 1902.

Application filed May 1, 1902. Serial No. 105,562. (No model.)

To all whom it may concern:

Be it known that I, PHILIPP BENDER, manufacturer, a subject of the Grand Duke of Hesse-Nassau, and a resident of Dotzheim, near Wiesbaden, in the Province of Hesse-Nassau, German Empire, have invented certain new and useful Improvements in File-Handles, of which the following is an exact specification.

10 My invention relates to improvements in file-handles, and has for its purpose to provide means for preventing a bursting of the handles, said means consisting of a material which allows an easy tightening of the same.

15 My invention is represented in the accompanying drawing, which shows a vertical section of a filing-handle provided with my improvement.

a is the handle proper. On the upper end 20 *b* of the handle a groove is provided, in which groove a cord, gut-string, or the like *c* is situated. The depth of the groove *b* depends naturally upon the thickness of the material situated within the same, while the length of 25 this groove depends upon the purpose for which the file-handle is to be used, as for the different purposes the danger of bursting of the handle is different. Advantageously the cord, gut-string, or the like is fixed in the 30 groove by means of a suitable gluing material, so that the several windings of the cord are connected one to the other.

It is known already to construct handles in which the bursting of the same is prevented by winding a wire around the same; but this 35 wire has the disadvantage that in case it gets loose it is very hard to refasten the same. In order to do away with this disadvantage, I provide my new invention, in which a material is used which when moistened with water 40 shrinks together, so that in case the windings get loose they can be easily tightened again by moistening the same with water. Furthermore, the use of cord, gut-string, or the like has the great advantage that the material can 45 be easily fastened to the handle and that projecting parts as always occur in wire-windings and which may be injurious are avoided.

Having thus fully described the nature of my said invention, what I desire to secure by 50 Letters Patent of the United States is—

A file-handle provided on its upper end with windings of a material which shrinks when moistened with water, substantially as 55 described and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PHILIPP BENDER.

Witnesses:

JEAN GRUND,
CARL GRUND.