

C. F. DOLLNER.
UMBRELLA HANDLES.

No. 195,107.

Patented Sept. 11, 1877.

Fig. 1.

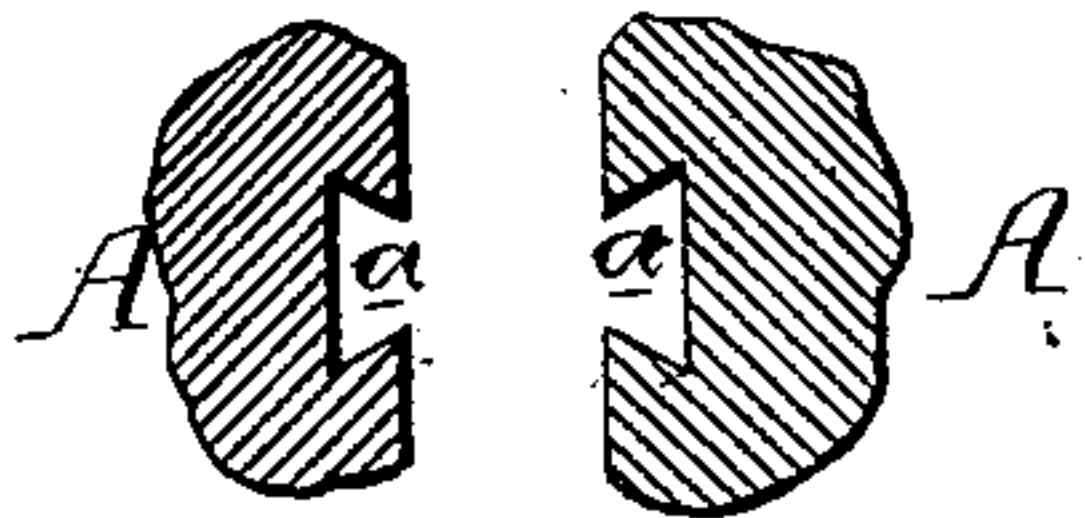


Fig. 2.

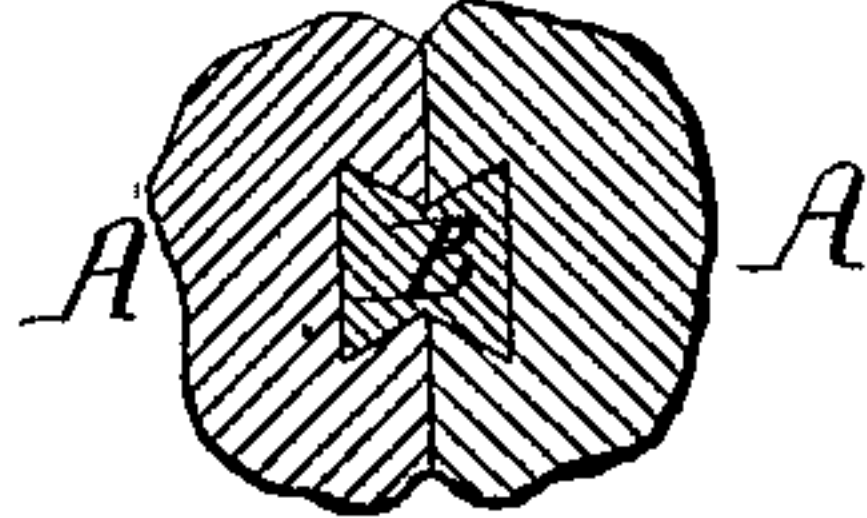


Fig. 3.

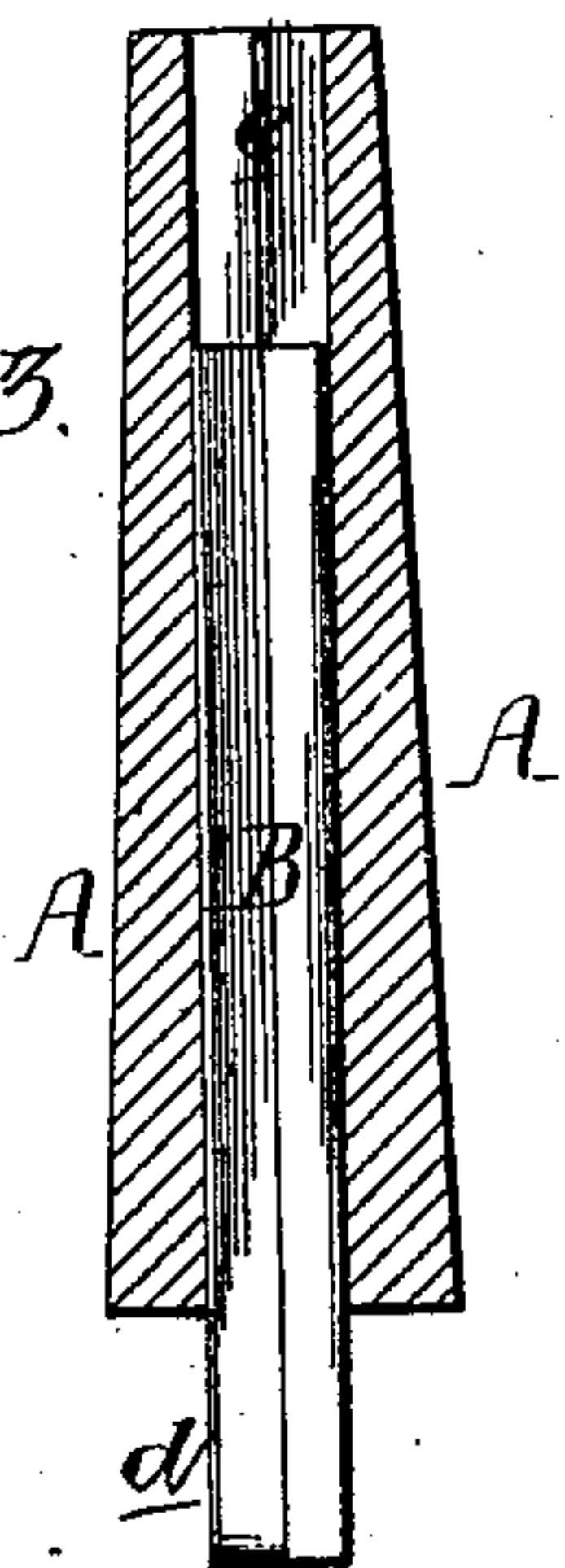


Fig. 5.

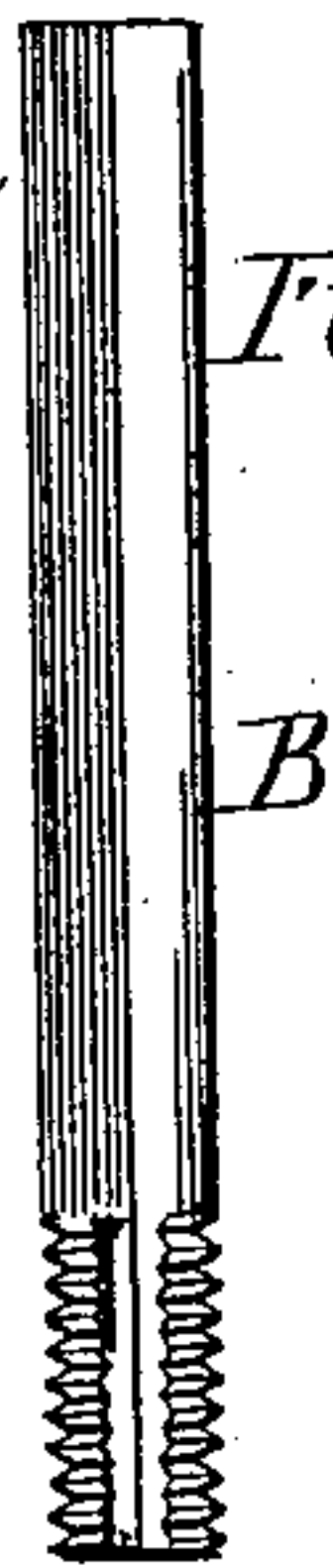


Fig. 4.

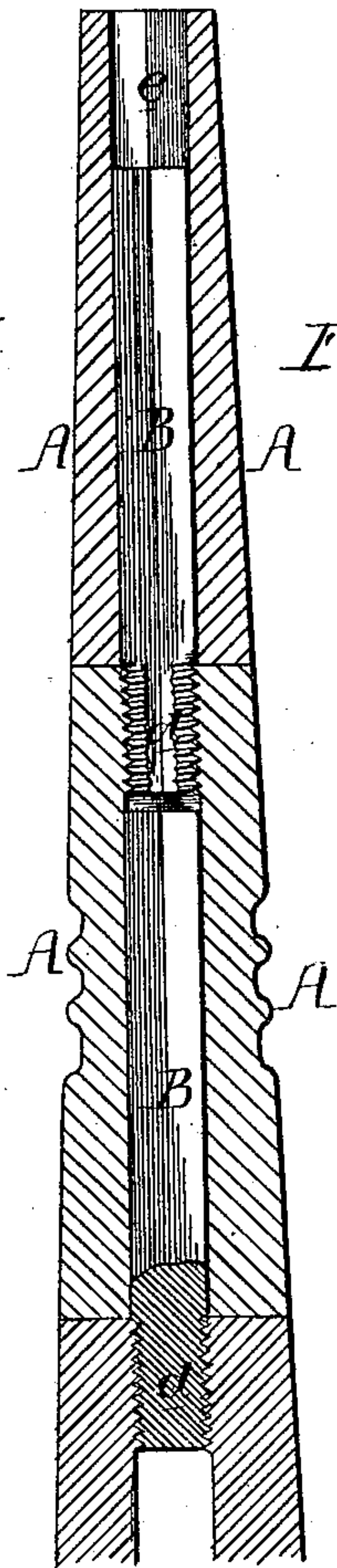
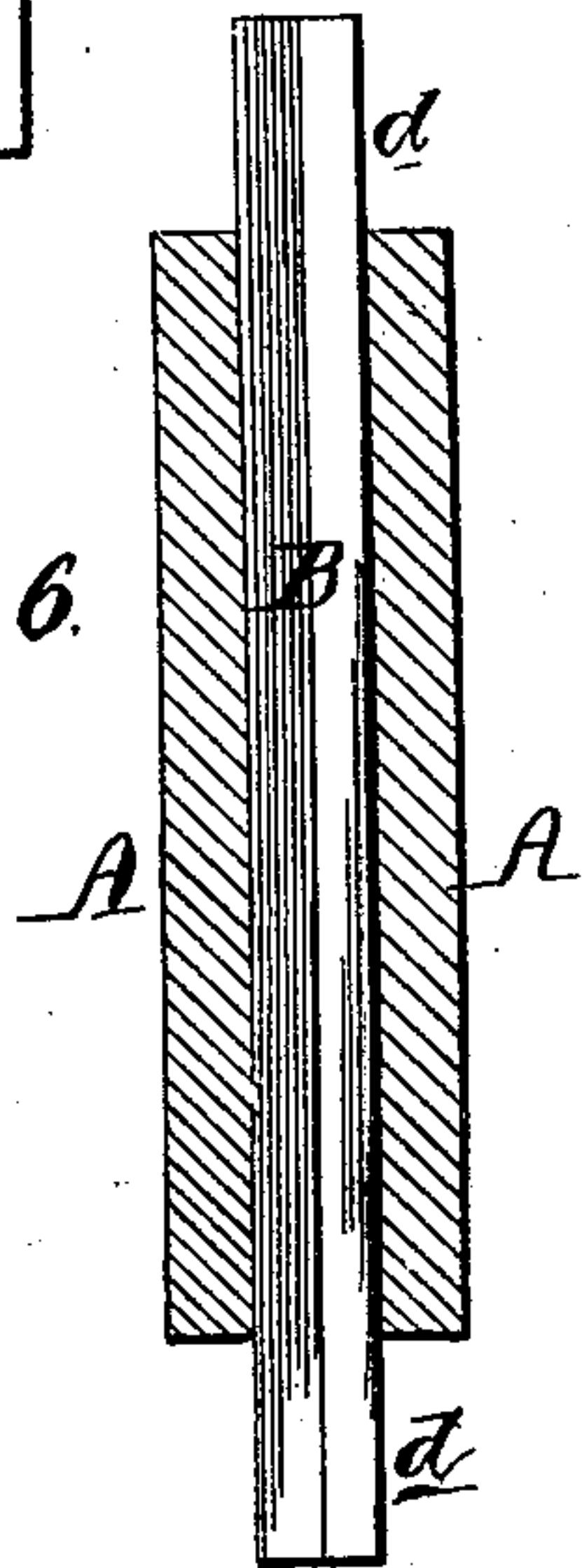


Fig. 6.



Witnesses.

Richard L. Gardiner
John K. Rupertus.

Inventor
Charles F. Dollner
by his attorneys
Howson & Wadsworth

UNITED STATES PATENT OFFICE.

CHARLES F. DOLLNER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN UMBRELLA-HANDLES.

Specification forming part of Letters Patent No. **195,107**, dated September 11, 1877; application filed January 22, 1877.

To all whom it may concern:

Be it known that I, CHARLES F. DOLLNER, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in the Manufacture of Bone Handles, of which the following is a specification:

The object of my invention is to provide a means of effectively securing together the pieces of which bone handles for whips, umbrellas, &c., are generally composed; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figures 1 and 2 are sectional views, illustrating the manner of securing two pieces of bone together according to my improvement; Figs. 3 and 4, views showing the method of preparing sections of a handle, and securing these sections together; and Fig. 5, a detached view, and Fig. 6 a modification.

The pieces of bone of which handles for umbrellas, whips, canes, &c., are composed are generally so small that it becomes necessary not only to make the handle of a number of longitudinal sections, but to make each of these sections of two or more pieces.

The sections of a handle have generally been secured together by metal screws, while the pieces composing each section have been secured together by various means. For instance, by gluing, by the use of sunken ferrules at the ends, or by the use of transverse screws, but all of these plans are objectionable on account of their cost and insecurity.

To overcome these objections, I take a piece of bone, A, and, after truing the inner face of the same, form in it a dovetailed groove, *a*, as shown in Fig. 1. I then take as many of these pieces as may be required to make a handle of the desired diameter, (two generally sufficing for this purpose, but more being demanded in some cases,) and these pieces I secure together, as shown in Fig. 2, by means of a dovetailed or ribbed strip, B, preferably of bone, adapted to the grooves *a* of the pieces A, the adjoining surfaces of the latter, as well as of the strip B, having been previously coated with glue or other cement. This forms a section which may be used in the construction of

a handle, and, in order to facilitate the securing of these sections together, I do not extend the strip B entirely through the section, but allow it to project at one end, so as to form a stem, *d*, the opposite end of the section having a corresponding recess, *e*. I then form on the stem *d* a screw-thread, and in the recess *e* a corresponding thread, so that a number of sections thus prepared can be readily secured together to form a handle of any desired length.

By the above means I am enabled to produce a handle which is almost as strong as a handle made of a single piece of bone.

In some cases the threading of the stems *d* and recesses *e* may be dispensed with, the stem of one section merely fitting into the recess of that adjacent, and being secured therein by glue or cement; and in other cases the strip B may project from both ends of a section, being threaded or not, as desired.

The strip B may be made of wood, metal, bone, or other suitable material, but bone is preferred, on account of the tenacity of the joint formed by uniting two pieces of bone directly together.

I claim as my invention—

1. A handle for umbrellas and other articles, composed of two or more pieces, A, of bone, having dovetailed grooves *a* in their inner faces, in combination with a dovetailed strip, B, as and for the purpose set forth.

2. The dovetailed strip B for umbrella and other handles, the said strip having a screw-thread formed at one or both ends, as set forth.

3. The combination of a composite section of a bone handle with a central strip, B, arranged, as described, so as to serve not only as a means of uniting the pieces of the section together, but of uniting said section to an adjacent section or sections, as set forth.

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

CHARLES F. DOLLNER.

Witnesses:

HERMANN MOESSNER,
HARRY SMITH.