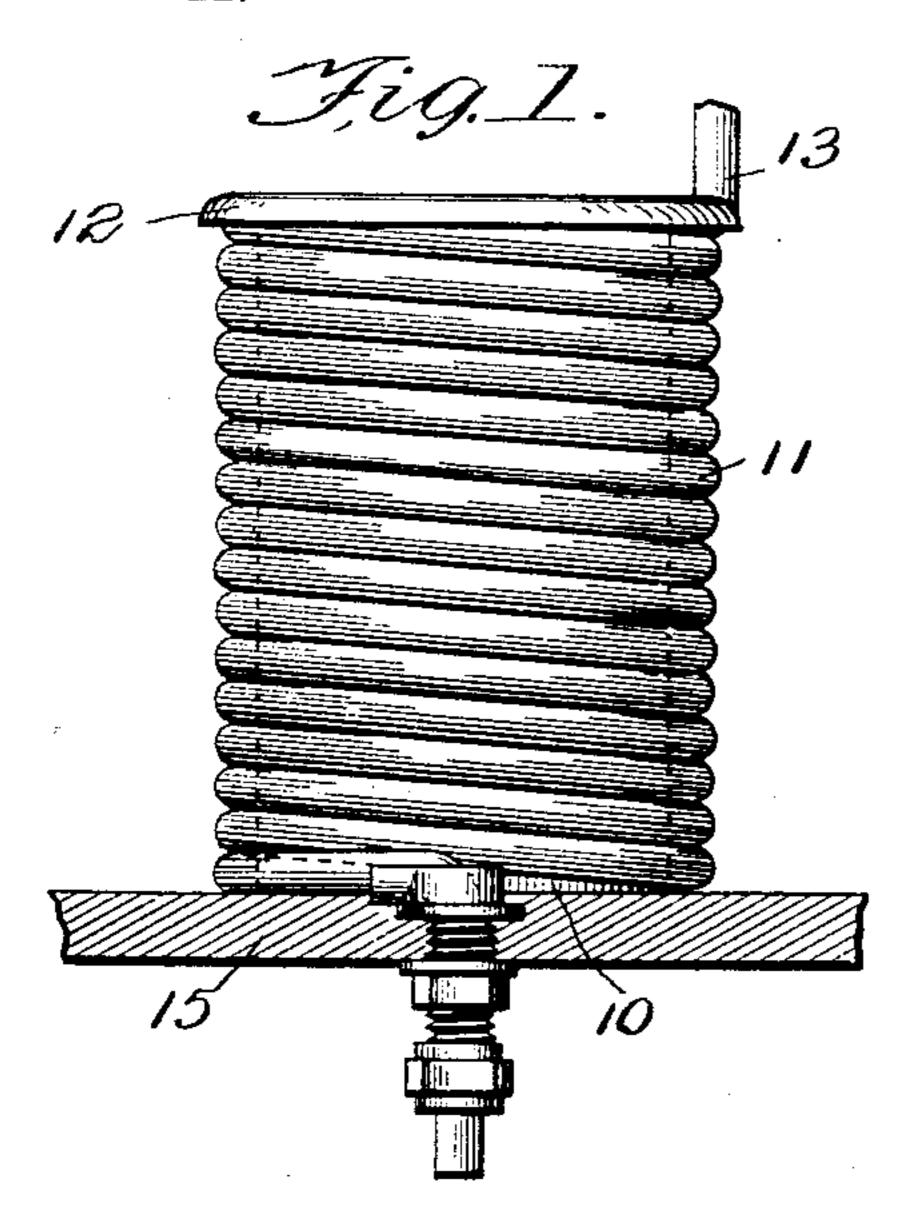
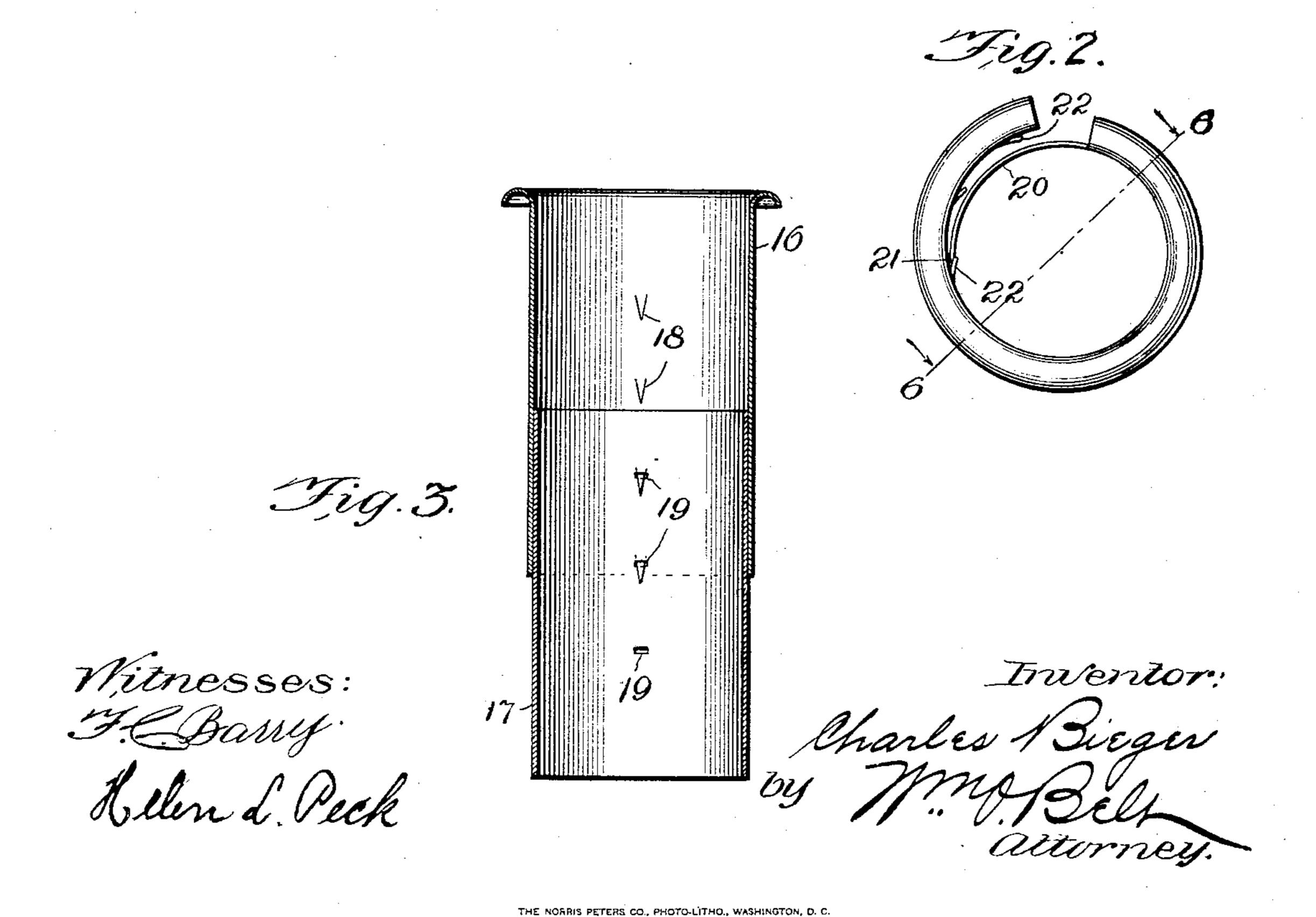
C. BIEGER. COIL PROTECTOR. APPLICATION FILED APR. 29, 1903.

MO MODEL.





United States Patent Office.

CHARLES BIEGER, OF CHICAGO, ILLINOIS.

COIL-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 751,776, dated February 9, 1904.

Application filed April 29, 1903. Serial No. 154,766. (No model.)

To all whom it may concern:

Be it known that I, Charles Bieger, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coil-Protectors, of which the following is a specification.

The object of this invention is to provide an inexpensive protector which can be readily and easily applied to pipe-coils for cooling beer and other liquids to protect the coils from being crushed and otherwise injured when the box in which they are located is filled with ice.

In the accompanying drawings, illustrating my invention, Figure 1 shows a coil provided with my protector. Fig. 2 is a top view of the protector. Fig. 3 is a vertical sectional

view on the line 6 6 of Fig. 2. The protector consists, essentially, of a sleeve 20, 10, conforming to the interior shape of the coil 11 and provided with a flange 12 to cover the top convolution of the coil, this flange being preferably cut out to receive the upturned end of the coil-pipe, which connects with the 25 draft-arm. The sleeve is made transversely expansible and longitudinally extensible, being composed of two telescopic sections 16 17, provided with fastening devices of some suitable character to secure the sections rigidly 3° in place after they have been adjusted. These fastening devices may consist of projections 18, stamped out of one section and adapted to enter openings 19 in the other section, Fig. 3. Each of the sections is preferably made of a 35 single sheet of metal with its edges unfastened and overlapping at 20, Fig. 2, so that they can be extended or contracted to fit the particular coil in which they are arranged. Suitable fastening devices for holding the sleeve in exact 40 position to fit the coil may be provided, such

as projections 22, to receive the end 21 of the overlapping portion 20. These coils are generally arranged close together in the ice-boxes and the ice is broken and packed in around them with a stick or mallet, frequently in a very 45 careless manner, the result being that the coils are commonly found crushed and disarranged, sometimes disjointed and broken. My protector is very simple in construction, inexpensive to manufacture, and can be easily and 50 quickly arranged in the coil. The protector holds the coil rigidly in place and forms a solid backing therefor, which effectually withstands the pressure of the ice and prevents the coils from being injured when the ice is 55 packed around them.

Without limiting myself to the exact construction and arrangement of parts herein shown and described, what I claim, and desire to secure by Letters Patent, is—

1. A protector for pipe-coils consisting of a sheet-metal sleeve constructed to slip within the coil and having its upper edge bent over and forming a flange to overhang the top of the coil, said sleeve being open at one side and 65 having its edges overlapping.

2. A protector for pipe-coils consisting of a telescopic sleeve constructed to fit snugly within the coil, and means for securing the sections of the sleeve rigidly together in adjusted 70 position.

3. A protector for pipe-coils consisting of a longitudinally-extensible and transversely-expansible sleeve adapted to fit snugly within the coil.

CHARLES BIEGER.

Witnesses:

WM. O. BELT, HELEN L. PECK.