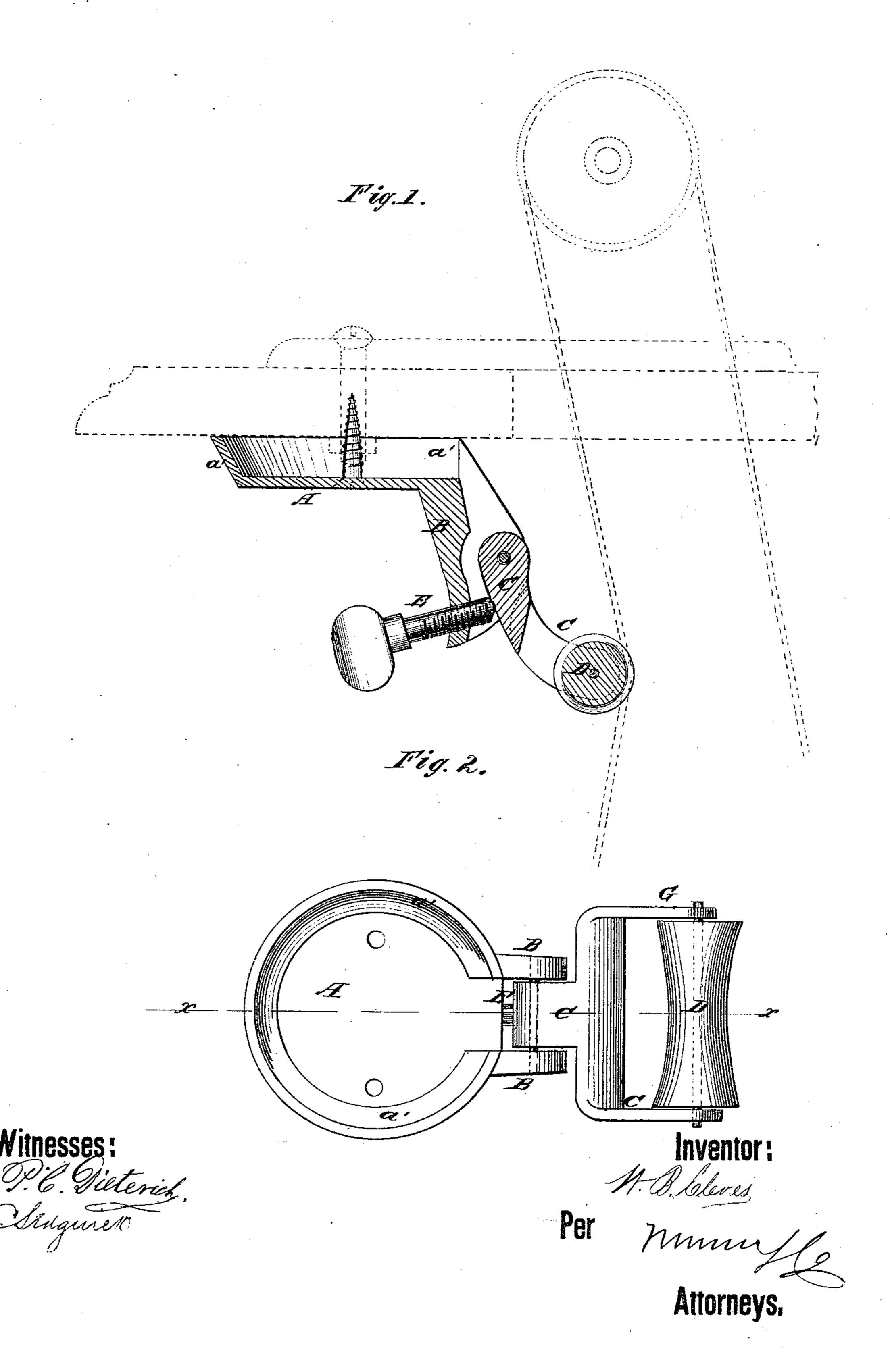
## W. B. CLEVES. Belt-Tighteners.

No.148,808.

Patented March 24, 1874.



## UNITED STATES PATENT OFFICE.

WILLIAM B. CLEVES, OF SAVANNAH, GEORGIA.

## IMPROVEMENT IN BELT-TIGHTENERS.

Specification forming part of Letters Patent No. 148,808, dated March 24, 1874; application filed May 17, 1873.

To all whom it may concern:

Be it known that I, WILLIAM B. CLEVES, of Savannah, in the county of Chatham and State of Georgia, have invented a new and useful Improvement in Belt-Tightener, of which the following is a specification:

Figure 1 is a sectional view of my improved belt-tightener, taken through the line xx, Fig. 2. Fig. 2 is a top view of the same.

Similar letters of reference indicate corre-

sponding parts.

My invention has for its object to furnish an improved belt-tightener designed especially for sewing-machine belts, which shall be simple in construction and convenient in use, enabling the belt to be readily tightened or slackened, as may be required. The invention consists in the belt-tightener formed by the combination of the base-plate, the pivoted arm, the concaved roller, and the hand-screw with each other, as hereinafter fully described.

A is a circular plate, which is made with an upwardly-projecting flange, a', three-eighths of an inch (more or less) in depth. The flange a' is designed to enable the plate to be attached to the under side of the table of those sewing-machines in which the machine is secured to the table by bolts and nuts. Upon the plate A is formed an arm, B, which is notched or slotted, or has lugs formed upon it, to which is pivoted an arm, C, to lugs formed upon the

outer end of which is pivoted the journals of a roller, D. The face of the roller D is concaved, as shown, to prevent the belt from running off the pulley when pressure is applied to it. The outer end of the arm B projects beyond the pivoting-point of the arm C, and has a screw-hole formed in it, to receive the hand-screw E, the rounded forward end of which rests against the pivoted arm C, so that by turning the screw E in, the arm C will be forced forward, pressing the roller D against the belt, and by turning the screw E out, the arm C will drop back, diminishing the pressure upon the belt.

The tightener is designed to be attached to the forward part of the machine, so that the operator can conveniently tighten and slacken the belt with one hand.

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

The belt-tightener formed by the combination of the base-plate A, arm B, pivoted arm C, concaved roller D, and hand-screw E with each other, substantially as herein shown and described.

WILLIAM B. CLEVES.

Witnesses:
W. H. Dooner,
F. G. Ryan.