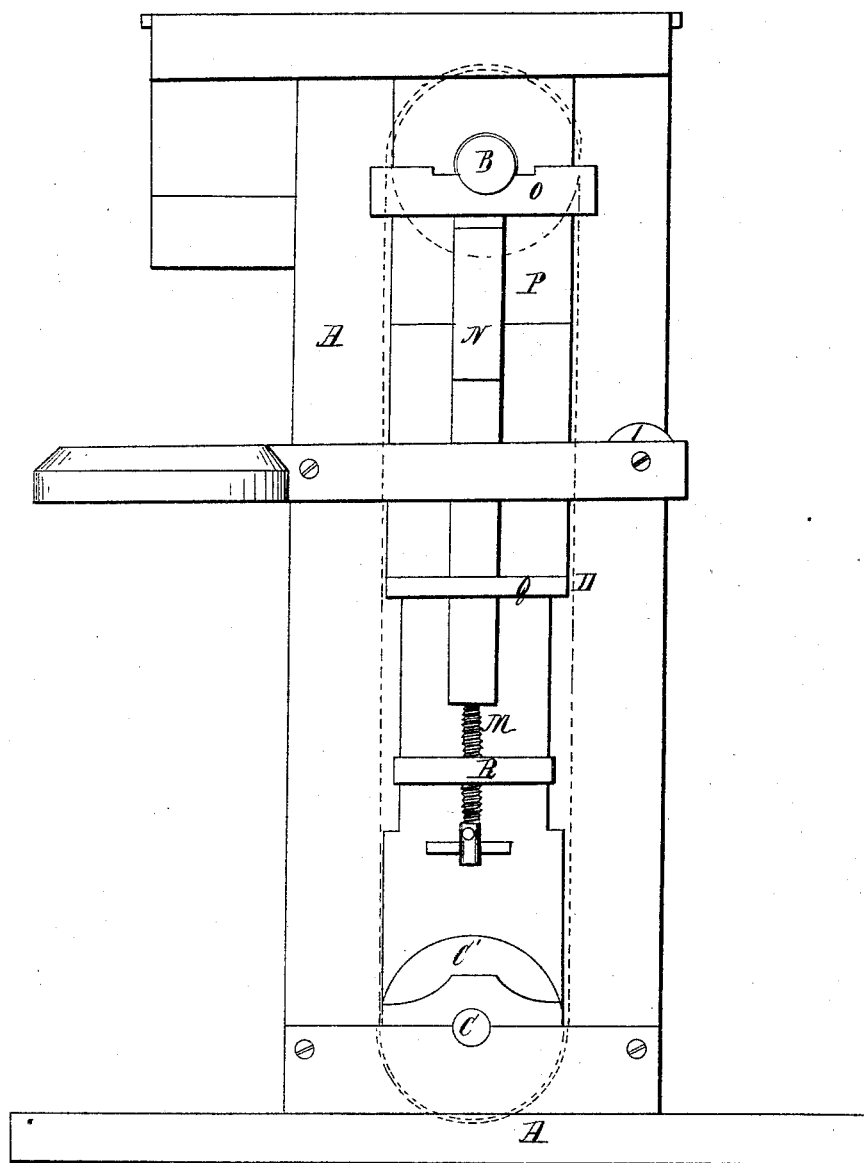


*J. Nichols,
Belt Tightener.*

N^o 45,514.

Patented Dec. 20, 1864.



*Witness
L. Bird.*

*Inventor,
John Nichols
by his attorney
Daniel Breed.*

UNITED STATES PATENT OFFICE.

JOHN NICHOLS, OF FOND DU LAC, WISCONSIN.

IMPROVED BELT-TIGHTENER.

Specification forming part of Letters Patent No. 45,514, dated December 20, 1864.

To all whom it may concern:

Be it known that I, JOHN NICHOLS, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented a new and useful Improvement in Belt-Tighteners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a peculiar construction and arrangement of belt-tightener.

In the accompanying drawings my belt-tightener is represented in connection with a grain-elevator, a part of which is not shown in the drawings.

Upon any convenient frame, A, are arranged two shafts and pulleys, B B' and C C', carrying a belt, D, shown in dotted lines. The upper shaft, B, rests on two boxes, O, which in turn are supported on the sliding box P. One of the boxes, O, may be adjustable upon the box P in order to level the shaft B. This adjustability may be obtained by means of a small set-screw in the usual manner. The box P is arranged so as to slide up and down in the frame A, the box being supported by the rod N and screw M. By turning the screw M, which has a bearing in the cross-piece R, the

sliding box P may be elevated and depressed at pleasure, thus tightening the belt D when desired. The bar Q serves as a guide to the rod N, and the box P is guided by the frame A and its cross-pieces at the top. This is a very simple and yet efficient arrangement for tightening belts.

In this application I make no claim to the grain-elevator, as I have made a separate application for a patent for such elevator; neither do I broadly claim belt-tighteners operated by a screw or by screws, but confine my claims to the peculiar construction and arrangement of belt-tightener, as described.

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

1. The combination of the rod or shaft N, (guided by the cross-bar Q,) with the screw M and pulley-shaft B, when constructed and arranged substantially as set forth.

2. The movable box P, in combination with the screw Y, for leveling the shaft B, substantially in the manner described.

JOHN NICHOLS.

Witnesses:

GEO. W. SANGER,
C. W. PRESCOTT.