

L. J. EUCHENHOFER & W. C. B. ANDERSON.

SWITCHBOARD PLUG CLEANER.

APPLICATION FILED FEB. 10, 1913.

1,065,600.

Patented June 24, 1913.

2 SHEETS—SHEET 1.

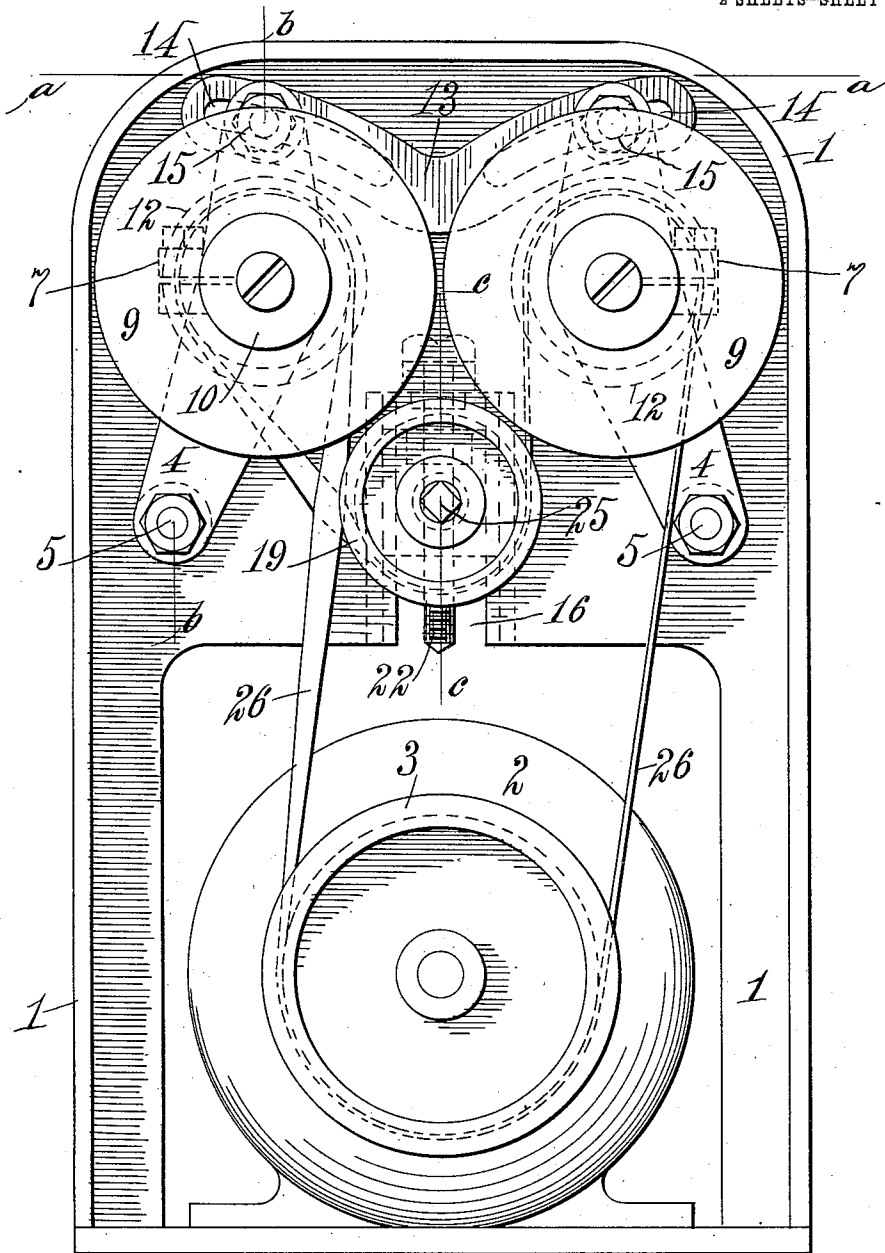


Fig. 1.

Inventors

Luther J. Euchenhofer
W. C. B. Anderson.

By R. J. M. Carty
their Attorney

Witnesses

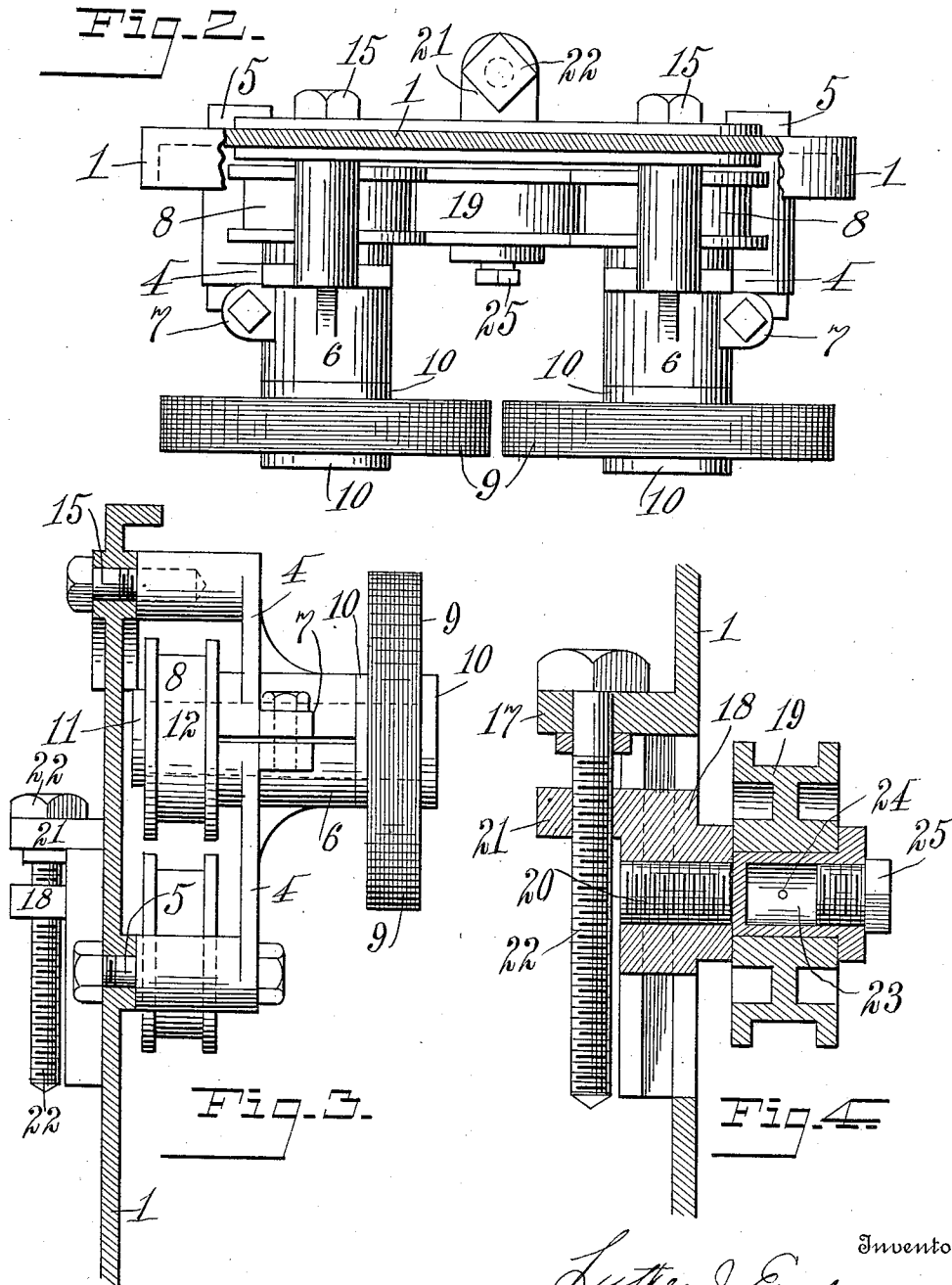
M. Siebler
M. Galloway

L. J. EUCHENHOFER & W. C. B. ANDERSON.
 SWITCHBOARD PLUG CLEANER.
 APPLICATION FILED FEB. 10, 1913.

1,065,600.

Patented June 24, 1913.

2 SHEETS—SHEET 2.



Witnesses
M. Liebler
M. Galloway

Inventors
Luther J. Euchenhofer
W. C. B. Anderson
 By *R. M. Carty*
 their Attorney

UNITED STATES PATENT OFFICE.

LUTHER J. EUCHENHOFER AND WALTER C. B. ANDERSON, OF DAYTON, OHIO.

SWITCHBOARD-PLUG CLEANER.

1,065,600.

Specification of Letters Patent. Patented June 24, 1913.

Application filed February 10, 1913. Serial No. 747,305.

To all whom it may concern:

Be it known that we, LUTHER J. EUCHENHOFER and WALTER C. B. ANDERSON, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Switchboard-Plug Cleaners; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to a machine for cleaning and polishing the contact ends of switch board plugs. Heretofore, so far as we are aware, this has been done by hand at the switch board, while the plugs are in service. This mode has been found objectionable owing to the tediousness of the work and the time consumed as well as the wear on the plugs.

It is, therefore, the object of our invention to provide a machine for cleaning and polishing the ends of switch board plugs with the following advantages. First, the machine is portable and can be conveniently moved along the switch board in the operations of cleaning and polishing the ends of the plugs; second, the cleaning and polishing of the contact ends of the plugs are accomplished in a more expeditious and satisfactory manner; third, the wear on the plugs is reduced to the minimum in the process of cleaning and polishing.

Preceding a detail description of the invention, brief reference is made to the accompanying drawings of which—

Figure 1 is a front side elevation; Fig. 2 is a sectional view on the line *a—b* of Fig. 1; Fig. 3 is a sectional view on the line *b—b* of Fig. 1; and Fig. 4 is a sectional view on the line *c—c* of Fig. 1.

In a detail description of the invention, similar reference characters indicate similar parts in the description and drawings.

The frame 1 is of suitable construction and weight and is designed to be supported upon wheels which it has not been deemed necessary to illustrate for the reason that the portable means for the frame is not involved in the invention and may consist of any common and well known form of truck. In proximity to the frame, a suitable motor

2 is placed, the shaft of which is provided with the flange pulley 3. Two levers 4—4 are pivoted on studs 5—5 which are supported upon the frame 1. These levers stand out from the frame as shown in Fig. 3 and are provided with clamp bearings 6 which are drawn together by means of a headed bolt 7. Supported in each of these clamp bearings 6 is the shaft 8 of a cloth wheel or buffer 9 which is made up of a suitable number of layers of cloth, such for example as muslin, which are stitched together a suitable distance from the circumference and center thereof. The shaft is held in its bearing by means of washers 10 and 11 two of which lie on opposite sides of the buffer 9. Also a flange pulley 12 is secured to the inner end of said shaft 8. The upper ends of the arms or levers 4 are adjustably connected to a projection 13 on the upper portion of the frame 1. This projection 13 is provided with elongated slots 14 which receive bolts 15 passing through openings in the ends of said levers and said slots and secured by suitable nuts. By these means the positions of the buffers or cloth wheels 9 may be adjusted relatively to each other as may be desired.

In the operation of the machine, the ends of the switch board plugs are inserted between the upper peripheries of the buffers and, owing to the direction of the rotation of said buffers being upward, any desirable pressure may be exerted against them by the plug in cleaning and polishing the same. Owing to the plugs being a trifle smaller or larger, the same adjustment of the buffers may be available. The center of the frame 1 is provided with vertical openings 16 and a lateral apertured projecting part 17 at the top of said opening. Within this opening a carriage 18 is placed to which is connected an idler or flange pulley 19 by means of a screw 20 which penetrates the axis of said pulley 19 and the carriage 18. Extending laterally from the upper end of the carriage 18 is an apertured projection 21 which receives an adjusting screw 22 which also passes through the lateral projection 17 of the frame 1. By means of this adjusting screw, the idler or pulley 19 may be adjusted vertically within the limit of the length of the screw or the opening 16 in the frame. The screw 20, or that portion thereof which lies within the axis of the idler 19, is provided with the lubricating chamber 23 for

the reception of vaseline which escapes through an opening 24 to lubricate said idler. A cap screw or plug 25 closes the lubricating chamber and is removable. The 5 buffer pulleys 12 are driven from the motor pulley 3 by means of a belt 26 which extends around said buffer pulleys and thence around the idler or flange pulley 19, the latter being adjustable by means of the screw 10 22 to preserve the requisite tension of the belt.

While we have shown a motor belted to the pulleys of the buffers, it will, of course, be understood that suitable gearing may be 15 employed to drive the buffers.

Having described our invention, we claim.

1. In a machine of the type specified, the combination with a suitable frame of cloth wheels, angular arms fulcrumed at their 20 lower ends on said frame and having clamp bearings at their intermediate portion for the shafts of said cloth wheels, a slotted projection on the upper portion of said frame, and bolts penetrating the upper ends 25 of said arms and the slots in said projection for adjusting the arms and therewith the cloth wheels relatively to each other, and

suitable means for driving said cloth wheels, substantially as specified.

2. In a machine of the type specified, the 30 combination with a frame, cloth wheels or buffers, angular arms fulcrumed on said frame and having their intermediate portion provided with bearings for the shafts of said cloth wheels, pulleys mounted upon 35 said shafts between the arms and the frame, a slotted projection on the upper end of said frame, bolts passing through the upper ends of said arms and the slots in said projection for adjusting the relative positions of the 40 cloth wheels, an idler mounted below said cloth wheels within an opening in said frame, means for adjusting said idler vertically, and a driven belt passing around the pulleys of the cloth wheels and said adjustable idler, substantially as specified. 45

In testimony whereof we affix our signatures, in presence of two witnesses.

LUTHER J. EUCHENHOFFER.
WALTER C. B. ANDERSON.

Witnesses:

CLARENCE B. TOLKERTH,
R. J. McCARTY.