C. L. SPRAGUE & C. A. WILSON.

DUST SCRAPER FOR ELEVATING GRADERS.

APPLICATION FILED OCT. 7, 1908. RENEWED SEPT. 23, 1909.

950,874. Patented Mar. 1, 1910.

Fig. 1

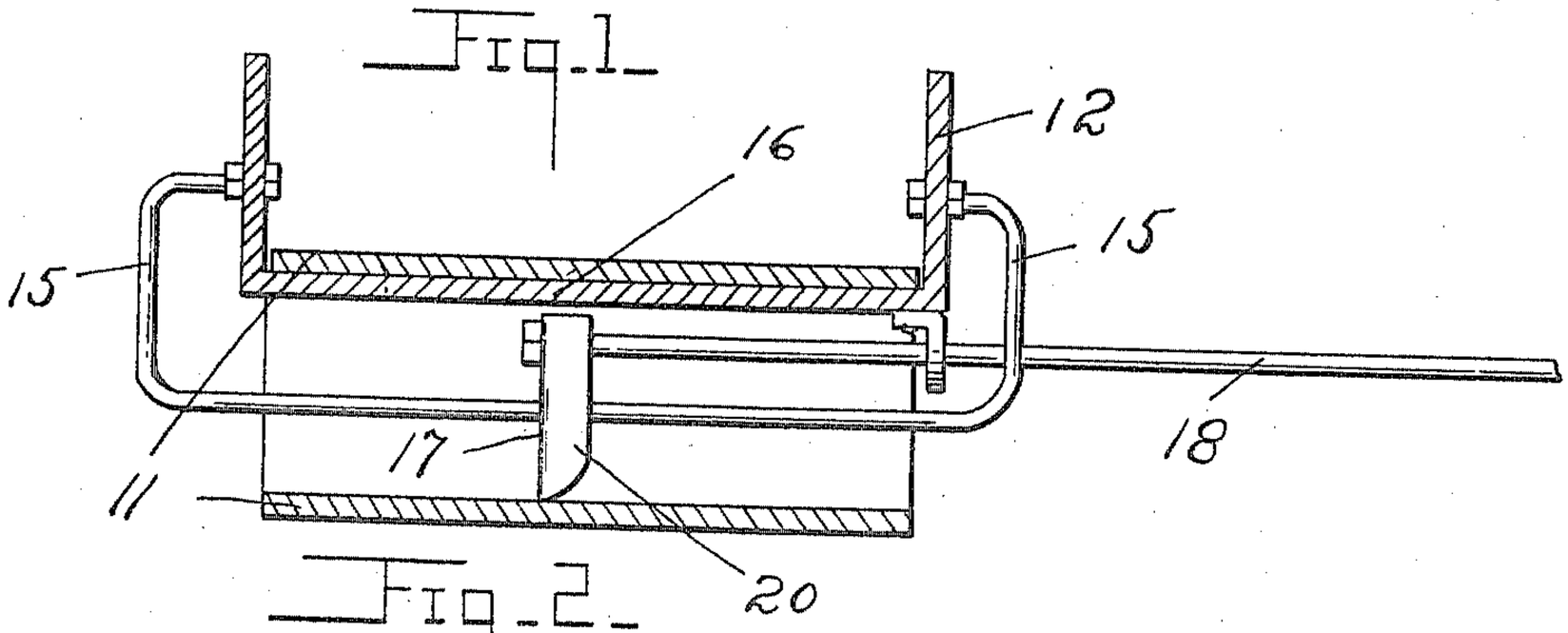

Fig. 2

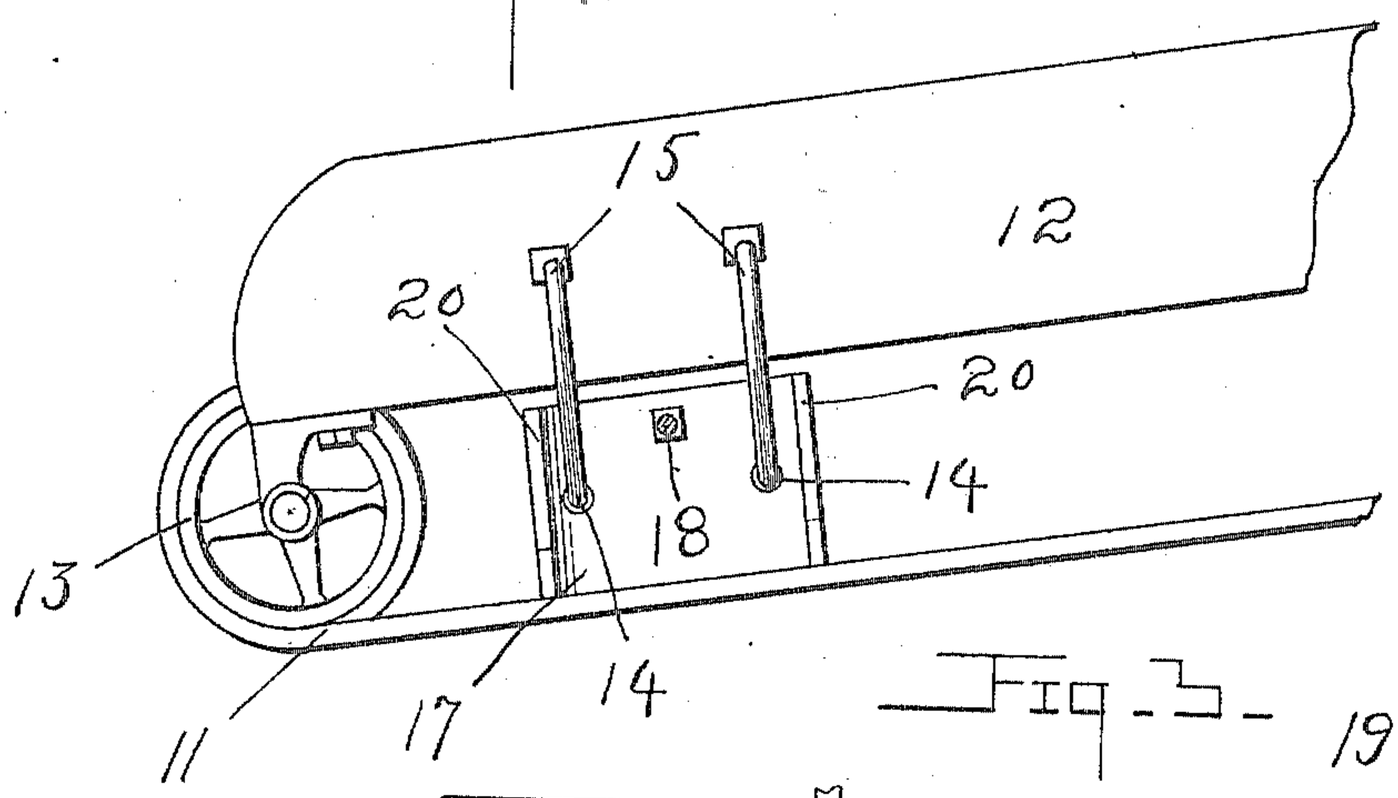

Fig. 3

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UNITED STATES PATENT OFFICE.

CHARLES L. SPRAGUE AND CHARLES A. WILSON, OF BUFFALO GAP, SOUTH DAKOTA.

DUST-SCRAPER FOR ELEVATING-GRADERS.

950,874. Specification of Letters Patent. Patented Mar. 1, 1910.

Application filed October 7, 1908, Serial No. 456,568. Renewed September 23, 1909. Serial No. 519,258.

To all whom it may concern:

Be it known that we, CHARLES L. SPRAGUE and CHARLES A. WILSON, citizens of the United States, residing at Buffalo Gap, in the county of Custer and State of South Dakota, have invented certain new and useful Improvements in Dust-Scrapers for Elevating-Graders, of which the following is a specification.

This invention relates to belt elevators, and more particularly to means for removing accumulation of dirt or other material from the inner face of the belt adjacent to its lower end where such material interferes with the operation of the conveyer by engagement between the belt and the operating roller or pulley.

It has for an object the provision of such a device which may be attached to belt conveyers of the usual type, and having means for manually operating the device when desired.

Another object is to provide such a device which may be manufactured at an extremely low cost, and which may be attached to conveyers without the provision of special construction for the reception of the device.

A particular object of this invention is to provide such a cleaner for belt conveyers of road grading machines.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a cross sectional view of the lower portion of the conveyer, showing the present device applied thereto, Fig. 2 is an end view of the device, attached as in Fig. 1, Fig. 3 is a side view of a portion of a road grading elevator equipped with the present device.

Referring to the drawings, there is shown a road grader including a supporting framework 10 and an earth-conveyer 11 comprising an endless belt traveling over the floor of a chute 12 and rollers 13 at the ends of the chute.

Secured to the chute 12 there are spaced rods 14 having upwardly extending portions 15 secured to the opposite sides of the chute 12, their central portions being disposed in spaced relation with the floor 16 of the chute as shown. Engaged loosely upon the rods there is shown a scraper comprising a rectangular plate 17 having spaced perforations therethrough receiving the rods 14 slidably therein and having an operating rod 18 extending centrally therefrom and at right angles with the plane of the plate 17. The outer end of the rod 18 is pivotally connected to a lever 19 extending upwardly and carried pivotally by the frame 10 of the grader as shown. The upper end of the lever 19 is provided with a handle and is adapted to be oscillated manually to move the plate 17 slidably upon the rods 14. It will be noted that as the plate 17 traverses the rods 14, the lower edge of the plate comes in scraping contact with the inner face of the belt 11 to remove the accumulation of dirt and other particles therefrom.

The plate may be provided with guide portions 20, if desired, comprising laterally extending portions at each end oppositely of the rod 18 provided with upwardly inclined lower edges. By this means the plate may be normally positioned to one side of the belt and out of contact therewith to prevent wearing action thereagainst. When operated the inclined edges of the portions 20 will engage over the belt and depress it sufficiently for the edge of the scraper to engage therewith.

What is claimed is:—

1. A cleaner for belt conveyers comprising spaced rods adapted to be mounted in spaced relation with the face of a belt, a scraper plate slidably mounted on the rods, and means for oscillating the plate longitudinally of the rod for scraping engagement with a belt.

2. The combination with a belt conveyer, of laterally extending guide members, a scraper member slidably carried thereby and

means for oscillating said scraper member for scraping engagement with the face of the belt.

3. A device of the class described comprising spaced rods adapted to be mounted in spaced relation with the face of the belt, a rectangular plate having spaced perforations therethrough slidably engaged upon said rods, and means for oscillating said plate longitudinally of the rods for scraping engagement with the face of a belt.

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

CHARLES L. SPRAGUE.
CHARLES A. WILSON.

Witnesses:
S. S. PEARLSTINE,
ALFRED H. BEACH.