No. 779,981. PATENTED JAN. 10, 1905.

J. C. WHITE.

DRAPER.

APPLICATION FILED JAN. 28, 1904.

Fig 1

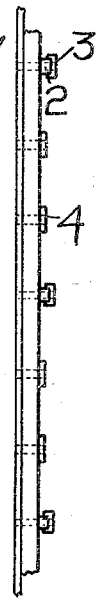


Fig 2

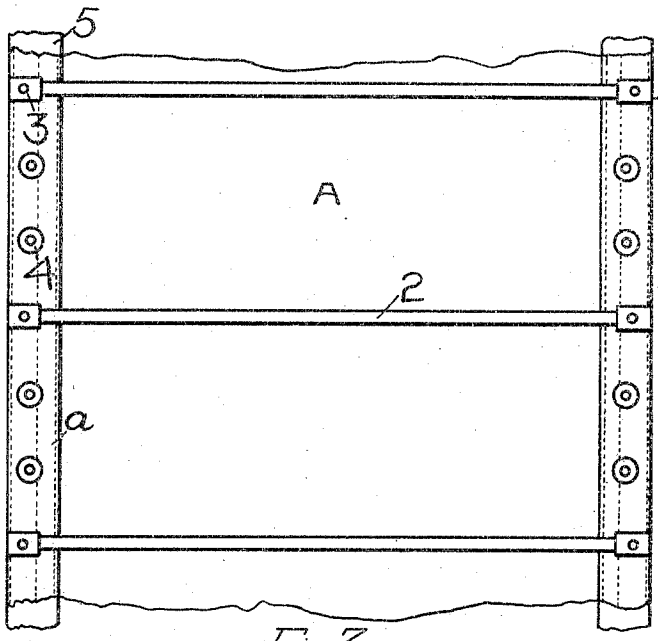


Fig 3

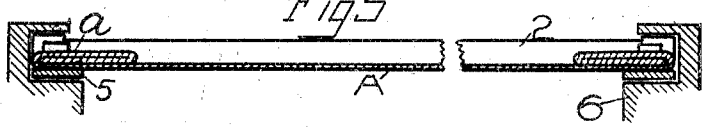


Fig 4

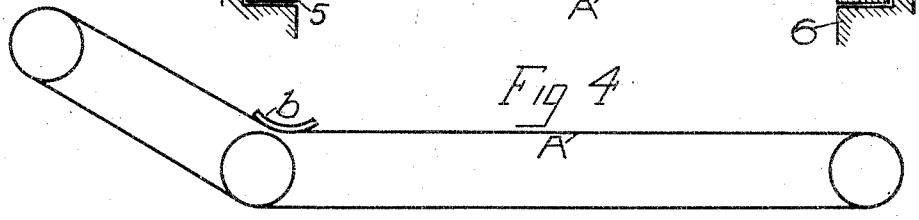


Fig 8

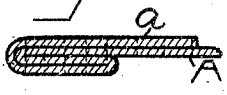


Fig 7



Fig 6

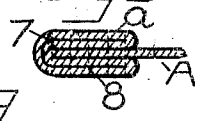


Fig 5

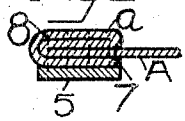
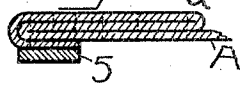


Fig 9



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PHOTOLITHOGRAPHED BY SACHETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 779,981. Patented January 10, 1905.

UNITED STATES PATENT OFFICE.

JOHN C. WHITE, OF MARYSVILLE, CALIFORNIA.

DRAPER.

SPECIFICATION forming part of Letters Patent No. 779,981, dated January 10, 1905.

Original application filed July 27, 1903, Serial No. 167,126. Divided and this application filed January 28, 1904. Serial No. 190,927.

To all whom it may concern:

Be it known that I, JOHN C. WHITE, a citizen of the United States, residing at Marysville, in the county of Yuba and State of California, have invented new and useful Improvements in Drapers, of which the following is a specification.

My invention relates to improvements in drapers for grain elevators, headers, harvesters, and the like; and its object is to provide a simple, economical, and novel form of lateral reinforce whereby the draper cloth or canvas may be protected against wear due from constant contact with the guides in which the edges of the draper run.

The present application is a division of my pending application, "Drapers," Serial No. 167,126, filed July 27, 1903, and includes matter therein described but not claimed.

It consists of the parts and the construction and combination of parts, as hereinafter more fully described, having reference to the accompanying drawings, in which—

Figure 1 is a side view of my improved draper. Fig. 2 is a plan view of same. Fig. 3 is a section through draper and guides. Fig. 4 is a diagrammatic view of a header-draper. Figs. 5, 6, 7, 8, 9 are modifications of my improvement.

A represents an endless sheet or strip of heavy canvas like as used, for example, in drapers for heading-machines.

2 represents the usual draper-slats; 3, the draper-slat protectors; 4, the leather washers between which and the endless leather belts 5 the canvas A is riveted, and 6 the lateral guides in which the edges of the draper and ends of the slats usually run.

In spite of the use of the belts 5 and of the washers and of the draper-slat protectors the draper-cloth is continually subject to wear along the edges intermediate of these protecting-points, where it comes in contact with the upper wall of the guides either in passing around pulleys or at the angles where the plane of the draper is changed, as indicated at *b*, Fig. 4, or due from the pucker or sag of the canvas. My invention contemplates providing the canvas along its selvage edges with a plurality of continuous longitudinal folds or layers united by a plurality of independent longitudinal stitchings, the several folds or layers disposed to take the wear successively from the main draper-canvas, so that as one layer after another becomes worn through the transverse tension of the draper will still be maintained by the support afforded to the remaining layers and canvas by the longitudinal stitchings. The width of the lateral reinforces, which are denominated by letter *a*, depends on the width, length, and weight of the belt, varying from two to six inches, according to the machine in which the draper is used or the use to which the draper is put.

In Fig. 5 is shown a four-ply arrangement of lateral reinforce wherein an edge of the canvas is first folded over, the width of this first fold being twice the desired width the reinforce is ultimately to be and the selvage edge stitched, as shown at 7. This folded portion is then folded so that the double-layer part of the fold lies upon the opposite side of the canvas and the four thicknesses then united by a plurality of longitudinal stitchings, as indicated at 8. Thus the canvas body of the draper is provided with both upper and lower protecting layers, one below and two above, or vice versa, as the case may be. In Fig. 6 this idea of upper and lower protective layers is carried a step further and the canvas is so folded as to provide a five-ply lateral reinforce with two upper and two lower layers, while in Fig. 7 it is folded to form a six-ply lateral reinforce with two upper and three lower layers. Again, in Fig. 8 is shown a modification applicable to ordinary standard-width drapers, in which a separate piece of duck about nine inches wide or any other suitable width is folded one or more times lengthwise and then laid along each edge of the canvas, so as to provide one or more protective layers above and below the canvas body. The latter and these folded portions are then united by a series of longitudinal stitchings 8. Preferably the fold on the upper side of the draper will extend inwardly beyond the undermost fold and guides 6, as shown in Figs. 3 and 8.

In header-machines the draper travels parallel with the sickle and at right angles to the

direction of travel of the machine. The headed grain falls from the sickle directly upon the horizontal portion of the draper and is carried thence up the inclined portion and discharged into the header-wagon. In consequence of the grain-heads falling constantly on that side of the draper immediately adjacent to the sickle that side or edge is subject to far more wear than the central portions of the draper. It therefore becomes necessary to turn the draper around after a period of use and let the other edge of the draper take the wear. This wear due to friction and impact of the grain-heads is outside of but immediately adjacent to the guide on the sickle side and is quite distinct from the wear on the draper within the guides. The object of providing the inwardly-extending upper lateral layer or layers, as illustrated in Figs. 3, 8, 9, is to protect the main draper-body against the impact of the falling heads. The reinforce layers need not extend over two or three inches beyond the guides. When the layers on one side of the draper become worn, the draper may be turned around and the opposite lateral extension layers receive the wear. Thus I provide for two contingencies—wear within due to the guides and wear outside of but immediately adjacent to the guides and due to the friction of the falling heads.

It is understood that these drapers are made of heaviest canvas and when folded and stitched as described their strength and durability are immensely increased and they have little or no tendency to stretch, to counteract which tendency is the general purpose of the leather belts 5. In fact, where the drapers are provided with the upper and lower reinforces it is possible in many instances to do away with the stiff leather belts 5, since the parts *a* become, essentially, lateral canvas belts fast to the intermediate draper-canvas.

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

1. A draper consisting of an endless strip of fabric with a plurality of continuous longitudinal protective lateral layers of fabric integral with said strip along its upper and lower surfaces and means for uniting said layers to the body of said endless strip.

2. A draper consisting of an endless strip of fabric with upper and lower protective folds adjacent to each edge of and integral with said strip and inclosing said edges.

3. A draper consisting of an endless length of heavy fabric with lateral integral upper and lower protective strips or layers.

4. A draper consisting of an endless strip of fabric with lateral upper and lower protective folds or layers, said upper folds or layers projecting inwardly beyond the lower folds or layers.

5. A draper for header-machines and in combination with the draper-guides thereof, consisting of an endless length of fabric having lateral protective folds on its upper surface inclosing the edges of the draper and projecting inwardly beyond the guides, substantially as described and for the purpose specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN C. WHITE.

Witnesses:
RICHARD BELCHER,
ALLEN L. COOLEY.