

(No Model.)

E. W. HANAUER.
TROUSERS GUARD.

No. 586,286.

Patented July 13, 1897.

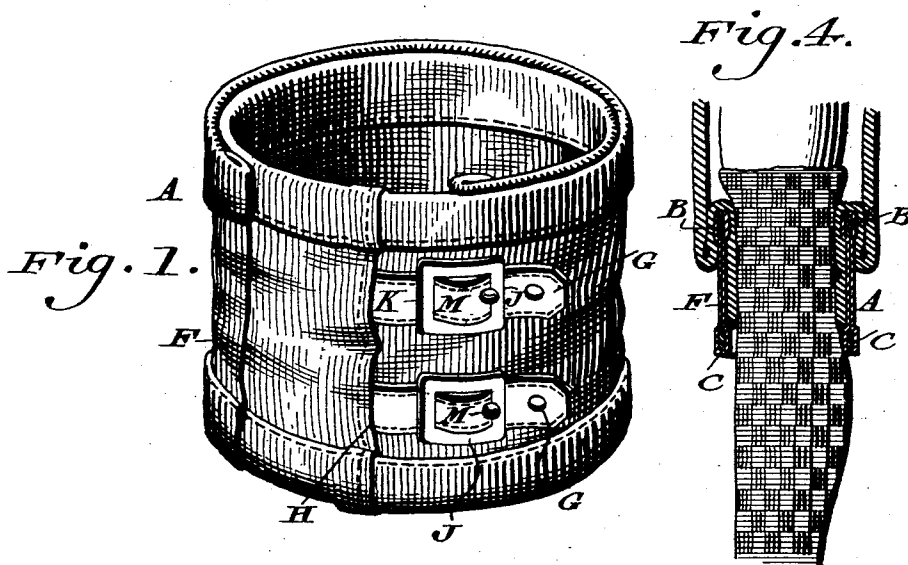


Fig. 2.

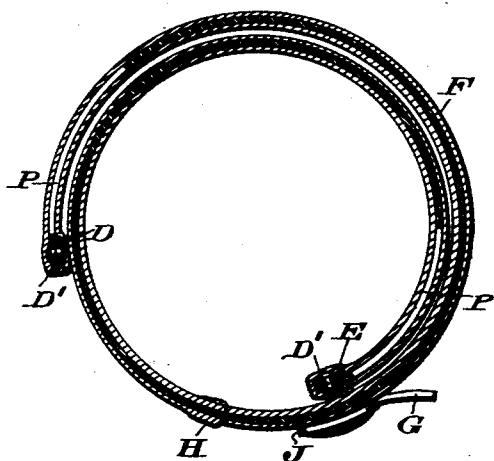
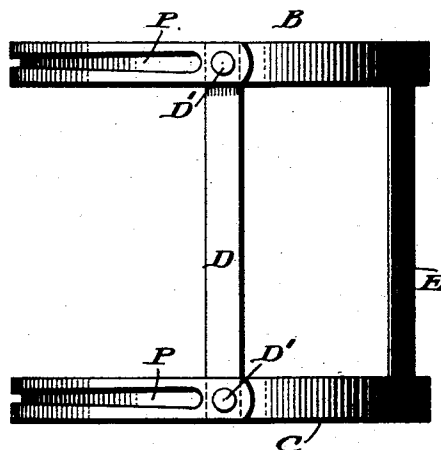


Fig. 3.



WITNESSES

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TROUSERS-GUARD.

SPECIFICATION forming part of Letters Patent No. 586,286, dated July 13, 1897.

Application filed May 27, 1897. Serial No. 638,370. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. HANAUER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Trousers-Guards, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a trousers-guard whereby the wearer is enabled by the same to transform a pair of long trousers into the appearance of golf and knickerbocker and other trousers, said guard simulating the present style of fastener on such trousers at the knees, the construction and arrangement of parts being as hereinafter described and claimed.

Figure 1 represents a perspective view of a trousers-guard embodying my invention. Fig. 2 represents a horizontal section thereof. Fig. 3 represents a side elevation of the interior frame of the guard. Fig. 4 represents a vertical section of the guard and part of trousers in position on the leg of the wearer.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a trousers-guard, the same consisting of the upper and lower springs B and C, formed of resilient flat or other shaped plates, which are for the greater portion of their lengths coiled upon each other, said plates, being flat, preventing injurious pressure or action on the legs of the wearer, as they lie comparatively parallel to the contacting places when in position. The extremities of the plates B and C are joined by the bars D and E, thereby forming a skeleton frame, the connection of said plates and bars being by means of pivots D', which permit the plates to turn on said bars, allowing the frame to yield in a vertical direction without closing, as the portion of the frame between the ends is free.

F designates the covering of the guard, the same being formed of cloth or other suitable fabric or material and inclosing the frame, and is secured thereto in any suitable manner.

H designates a plait or fold formed in the covering F.

G designates straps, one end of each of which is secured within said plait H and the other end extending over the adjacent part of

the covering F. On the said straps are placed the frames J, the same simulating buckles and each formed of a piece of metal suitably stamped or struck up and consisting of the rim K and the tongue M.

In the strips B and C, near the extremities thereof, are longitudinally-extending slots P, which weaken the tension of the same, so that while sufficient pressure is obtained for closing the guard against the limb of the wearer the pressure is reduced, so as to avoid any injurious action, such as chafing or rubbing the limb on the place with which the guard is in contact.

The operation is as follows: The bottoms of the legs of the trousers are raised to some extent and the guards placed around the same, say at or about the ankles. Then the guards are slipped upwardly on the limbs to the knees and carry with them the bottoms of the trousers-legs beneath them. Portions of the trousers outside of the guards now fall in folds, while the guards are so constituted that while there is every appearance of trousers of the order of golfs, knickerbockers, &c., they are in reality long trousers, which, when the guards are removed, may be worn as usual, avoiding the necessity of wearing short trousers. In the sliding motions of the guards they expand and contract with the contour of the limbs of the wearer and then rest snugly in position, while being permitted to yield, due to the motions of the limbs, whether while riding or walking, the extensive overlapping of the ends of each spring-plate on itself forming long convolutions which permit the frame first to contract to a small diameter for thin limbs and then to expand to a great diameter for limbs of increased thickness or size and at all times to conform to the curvature of limbs whether thick or thin, while also preserving in substance a continuous curve or coil of the plates around the limb.

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

1. A trousers-guard consisting of a skeleton frame, formed of spring-plates curved in the direction of their length with their ends overlapping and bars connected at top and bottom with the opposite ends of said plates,

said plates coiling on themselves the greater portion of their lengths.

2. A trousers-guard consisting of a skeleton frame, formed of coiled spring-plates, with
5 their ends overlapping, and bars connected at top and bottom with the opposite ends of said plates, the plates coiling on themselves the greater portion of their lengths and being longitudinally slotted.

10 3. A trousers-guard consisting of a skeleton

frame, formed of coiled spring-plates, and bars at the opposite ends thereof, said bars being connected at top and bottom with said ends of the springs by means of pivots which permit the plates and bars to turn on each 15 other.

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