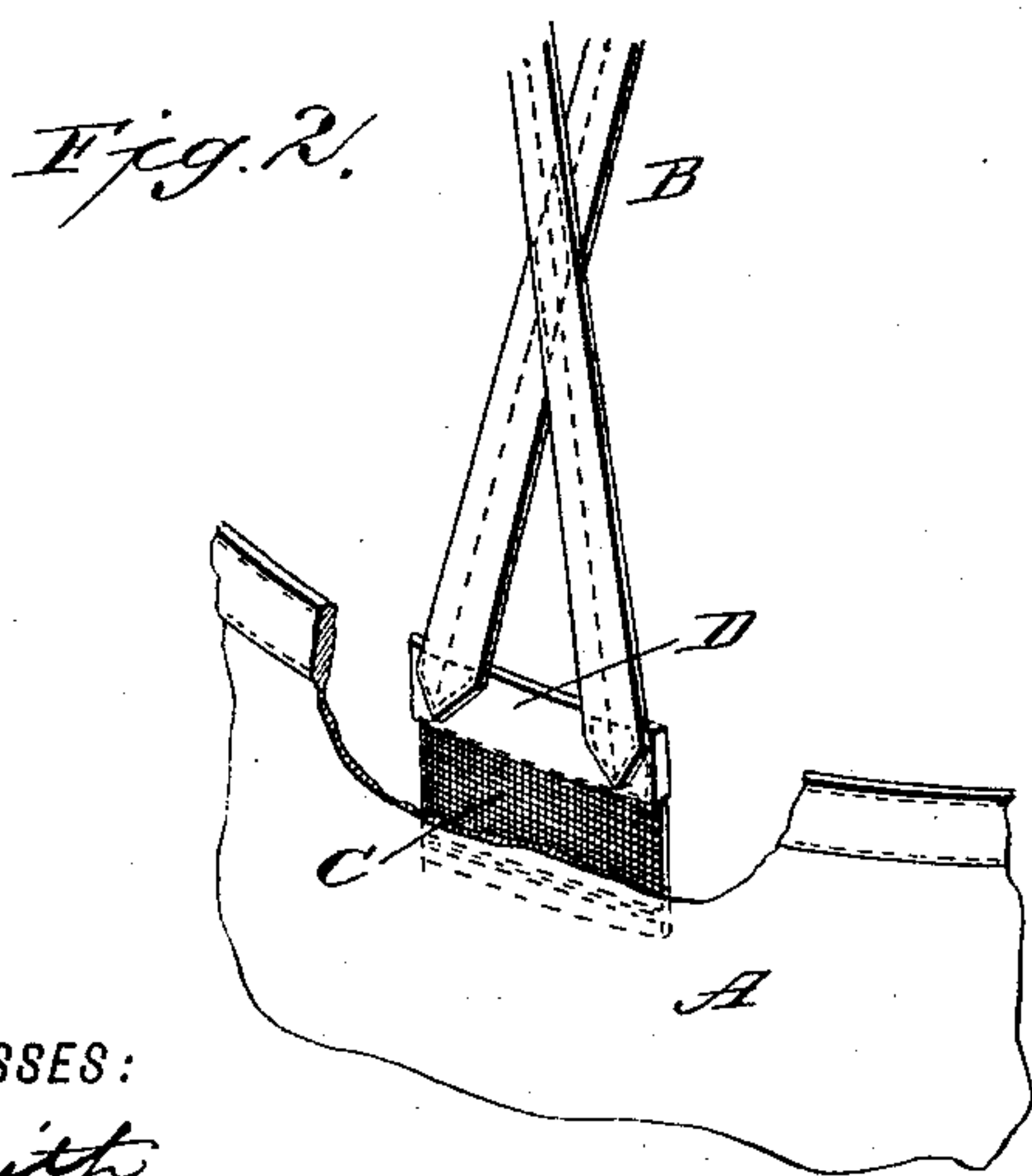
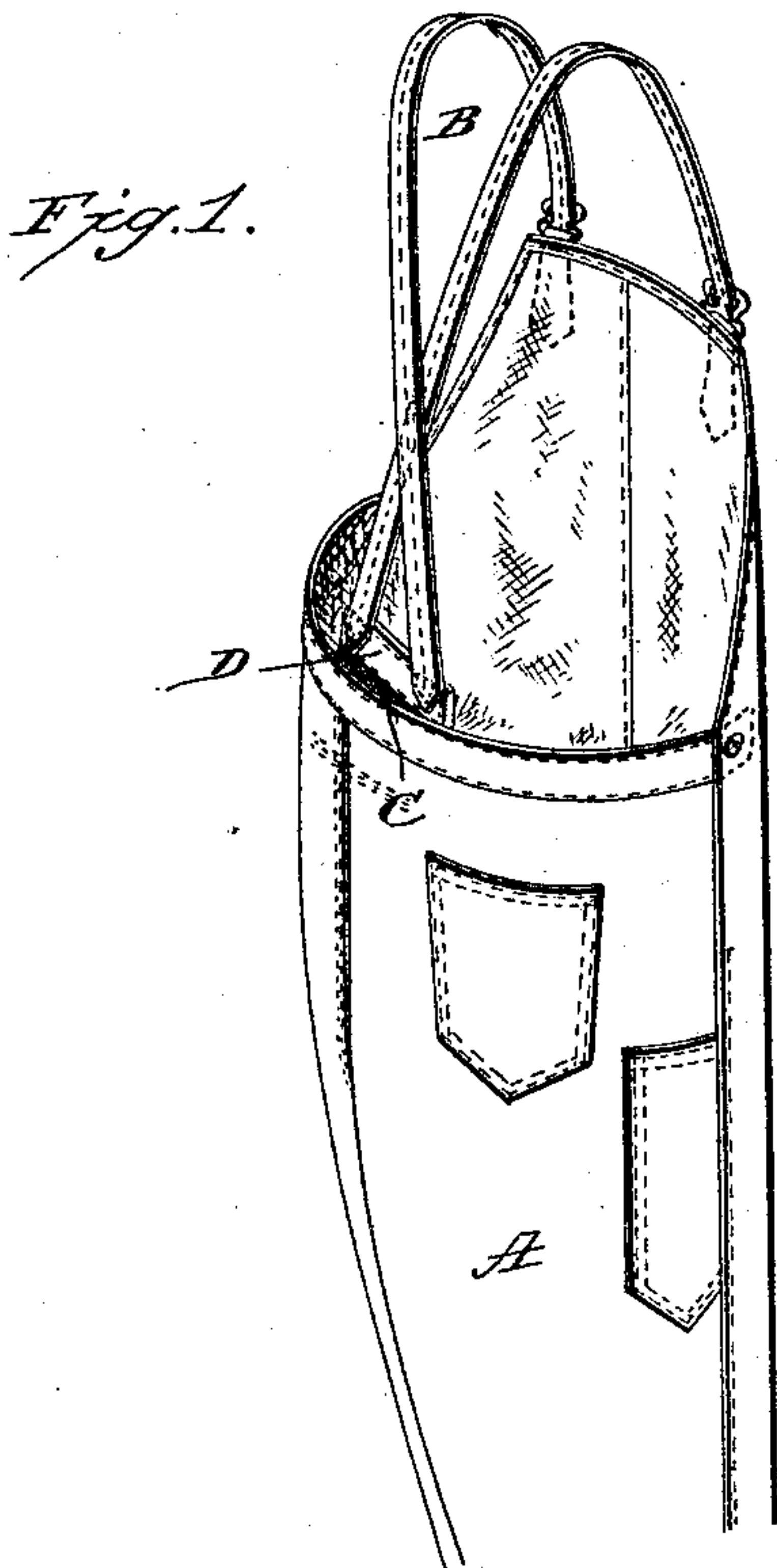


(No Model.)

M. PFAFF.
OVERALLS.

No. 452,528.

Patented May 19, 1891.



WITNESSES:

E. D. Smith
A. J. Stewart.

INVENTOR

Martin Pfaff.

BY

Louis Fisher & Co.

HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

MARTIN PFAFF, OF ST. PAUL, MINNESOTA.

OVERALLS.

SPECIFICATION forming part of Letters Patent No. 452,528, dated May 19, 1891.

Application filed December 8, 1890. Serial No. 373,930. (No model.)

To all whom it may concern:

Be it known that I, MARTIN PFAFF, of St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Overalls; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

To afford relief from any excessive and inconvenient strain or pressure in the wearing of overalls and nether garments generally, and to promote the comparative easy and healthy action of the body, various devices have been adopted and used, prominent among which are elastic suspenders, in whole or in part, and waist-belts, &c. It has been found, however, that the former impart no appreciable relief as far as the avoidance of strain around the waist, where the heaviest strain occurs, is concerned, while the latter device, that of waist-belts, aside from the unhealthy and injurious effect resulting from the use of the same, has failed to keep the overalls or nether garments up and in place at the hip-joint, requiring either constant readjustment or such excessive strapping as to interfere with the healthy function of the respiratory organs, more especially in the performance of labor requiring the constant bending or back-and-forward action of the body.

It is believed that the herein-described improved device will supply a want long felt, but never supplied, in the use of this kind of garments.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of a pair of overalls having my invention applied thereto. Fig. 2 is an enlarged perspective with a portion of the overalls broken away.

The letter A indicates the overalls of any desired style or material; B, the supporting means, in the instance shown consisting of shoulder-straps; C, the elastic web or "hinge" secured to the overalls in the upper part of the seat portion and below the waistband, as

at c, and D is the re-enforce attached along the upper edge of the hinge.

The essential feature of my improvement consists in providing overalls with a hinge of an elastic webbing or textile fabric of sufficient width to cover the backbone proper, having only its lower edge attached at a point of the overalls where the heaviest strain occurs—that is, immediately above the center of the seat, or a sufficient distance below the waistband to avoid any undue strain on the same—while the upper edge (re-enforced by a cross-band of the same material as the overalls) is directly attached in any suitable manner to the supporting means, as the lower ends of the shoulder-straps. This elastic hinge is made to act entirely independent of the waistband, leaving the latter loose and the waist free from any strain and friction, affording ample latitude not only to the free and easy action of the body and the respiratory organs in any direction, but also to the expansive capacity of the elastic fabric constructed purposely narrow in size and left loose at the side edges to afford full scope for longitudinal expansion.

I prefer to designate my device as a "hinge" because the construction, operation, and effect of this contrivance are similar to the action of a door-hinge, one section of which conforming to the movement of the body of the door, while the panel, to which the other section of the hinge is attached, remains at rest and free from any strain the same as my elastic hinge, the lower edge only of which is permanently attached to the seat of the overalls, and acts, so attached, entirely independent of the waistband, conforming in its action to the action of the body, leaving the waistband loose and at rest, allowing the whole body, together with the respiratory organs, ample scope to perform their legitimate function with comparative ease and freedom.

Having thus described my invention, what I claim as new is—

An article of manufacture consisting of the overalls, substantially as described, provided with a relatively narrow elastic supporting-hinge secured thereto by its lower

edge only in the upper part of the seat por-
tion independent of and below the waist-
band, and the re-enforce or supporting strip
secured on said hinge and having the sus-
5 pender-ends secured thereto, substantially as
described.

In testimony whereof I have hereunto set

my hand in presence of two subscribing wit-
nesses.

MARTIN PFAFF.

Witnesses:

HENRY SCHURMEIER,
LOUIS HAINLIN.