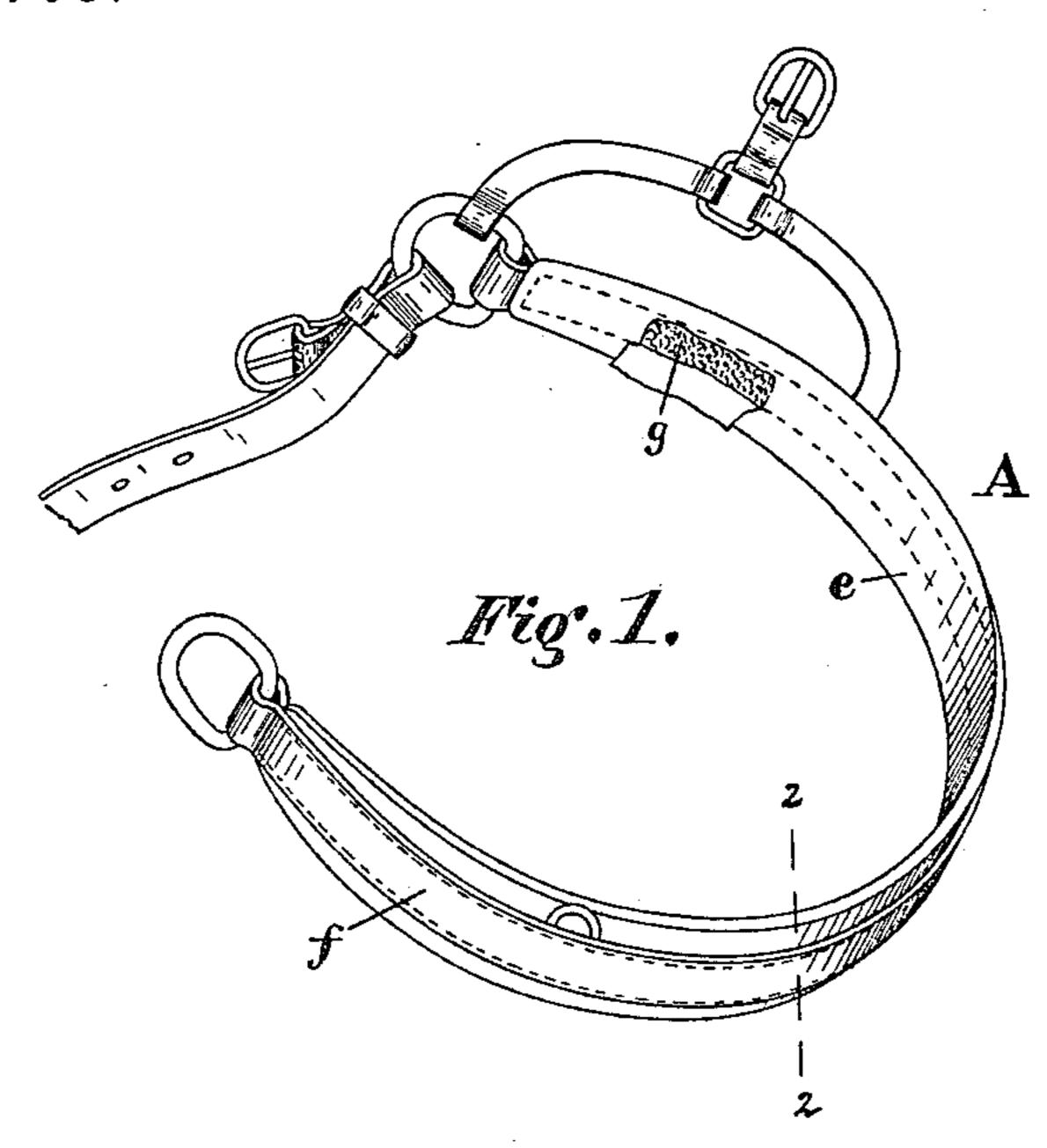
(No Model.)

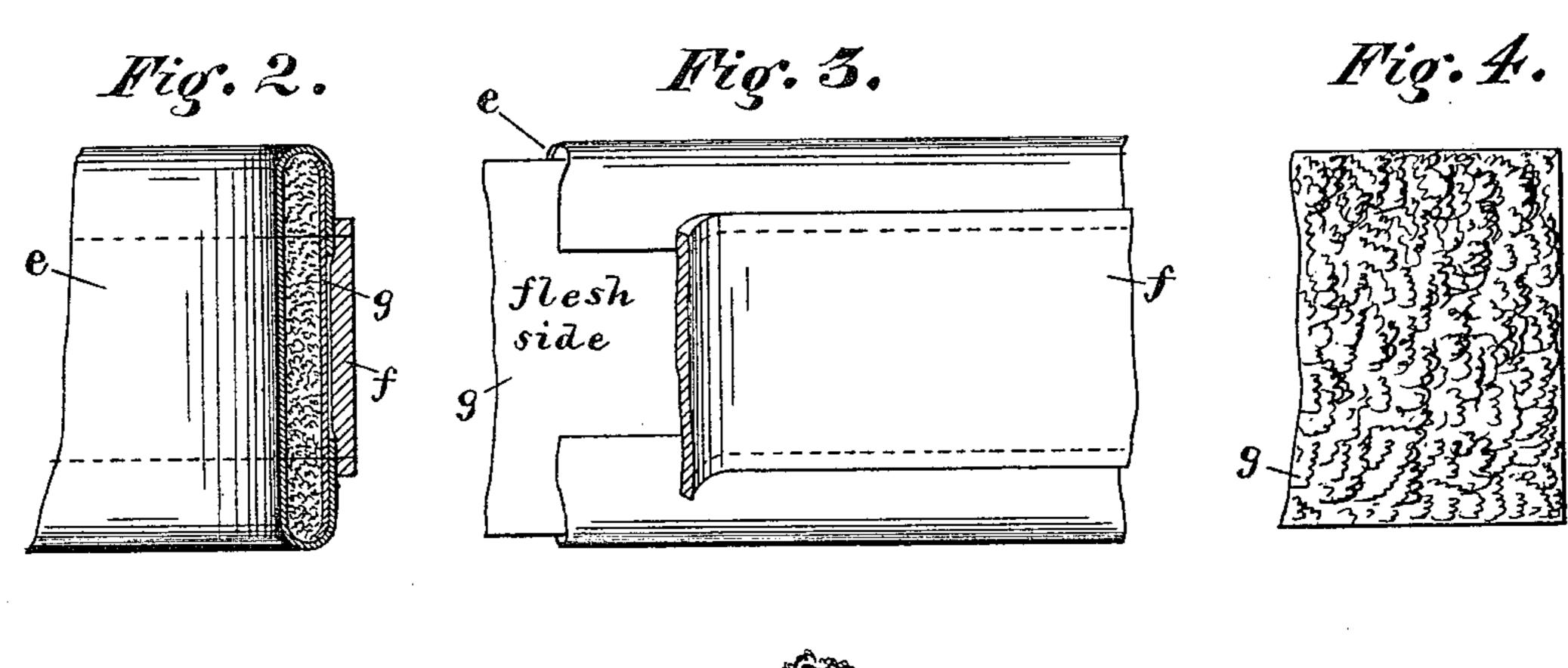
## I. BERGMAN.

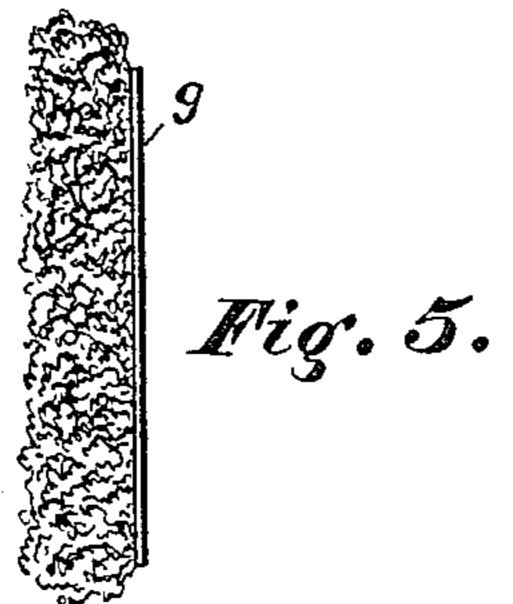
HARNESS STRAP.

No. 362,708.

Patented May 10, 1887.







WITNESSES:

INVENTOR:

J. K.E. Diffunderffer. John & Morris

Isaac Bergman

By Chas B. Mann

## United States Patent Office.

ISAAC BERGMAN, OF BALTIMORE, MARYLAND.

## HARNESS-STRAP.

SPECIFICATION forming part of Letters Patent No. 362,708, dated May 10, 1887.

Application filed January 25, 1887. Serial No. 225,424. (No model.)

To all whom it may concern:

Be it known that I, ISAAC BERGMAN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented a cer-5 tain new and useful Improvement in Harness-Straps, of which the following is a specification.

This invention relates to an improvement in the construction of certain straps of harness, to to wit: those straps which are subjected to most strain, and which at the same time bear directly against the animal and are liable to chafe his skin. These include the breeching or holdback strap, the breast-strap, the neck-15 strap, and the belly-band, all of which are padded straps having a re-enforce.

The invention is illustrated in the accom-

panying drawings, in which-

Figure 1 is a view of a breeching or hold-20 back strap having my invention. Fig. 2 is a cross-section of same on line 2.2. Fig. 3 is an outer face and broken portion view of the strap. Fig. 4 shows the wool side of a piece of the sheep-skin. Fig. 5 is a cross section of 25 the sheep-skin.

The letter A designates the breeching-strap, made according to my invention. This and the other similar straps referred to must be perfectly flexible and soft, so as to avoid in-30 jury to the animal, and therefore are ordinarily wadded. It must also have tensile strength to withstand the strain of the pull to which in use it is subjected, and therefore it is ordinarily re-enforced on the outer side by 35 a heavy strap.

I have found that the straps referred to, when made as hereinafter described, are far superior in point of durability, flexibility, and softness, and in the permanent retention of

40 the two last-named qualities.

The inner face, e, of the strap (that side which is in contact with the animal's skin) is composed, as usual, of any suitable leather. The outer face of the strap has the usual re-45 enforce, f, of heavier leather to give strength, and between the inner-face strap and the outerface strap is the tanned sheep-skin or other skin, g, which has its natural wool or hair ad-

hering, the said wool or hair being inclosed and in contact with said inner-face strap e, 50 while the flesh side of the sheep-skin is in contact with the re-enforce f. It will thus be seen that the sheep-skin, as used, serves two duties or functions. First, it is a substitute for nearly the same quantity of leather, in that 55 the leather of the inner-face part e need not be folded or doubled over on the outer side as far as usual, but may be narrowed; second, the wool adhering naturally to the skin serves as a superior wadding, and imparts to the fin- 60 ished strap a kind of flexibility and softness

not hitherto found in such straps.

I am aware that it is not new to construct a harness-strap in which a wool covering is used; but such is liable to become at first matted by 65 rubbing against the body of the animal, thereby chafing the skin and soon becoming glazed by the wearing of the wool, so that it loses its original characteristics. I am also aware that it is not new to provide sheep-skins for pads 70 for saddles, and such I do not claim; but I am not aware that for filling or stuffing of a strap strips of sheep-skin with the wool thereon have been used, whereby an increased flexibility is imparted to the strap, the wool thus 75 serving two purposes.

Having described my invention, I claim and desire to secure by Letters Patent of the United

States—

1. An improved harness strap having a fill- for ing of sheep skin with the wool thereon, and a re-enforce, f, on the outer side, substantially as shown and described.

2. An improved harness-strap having a filling of sheep skin with the wool thereon, and 8: a re-enforce, f, on the outer side, the wool side of said filling being adjacent to the inner face of the strap, all substantially as and for the purpose described.

In testimony whereof I affix my signature in 90 the presence of two witnesses.

ISAAC BERGMAN.

Witnesses: JOHN E. MORRIS, JNO. T. MADDOX.