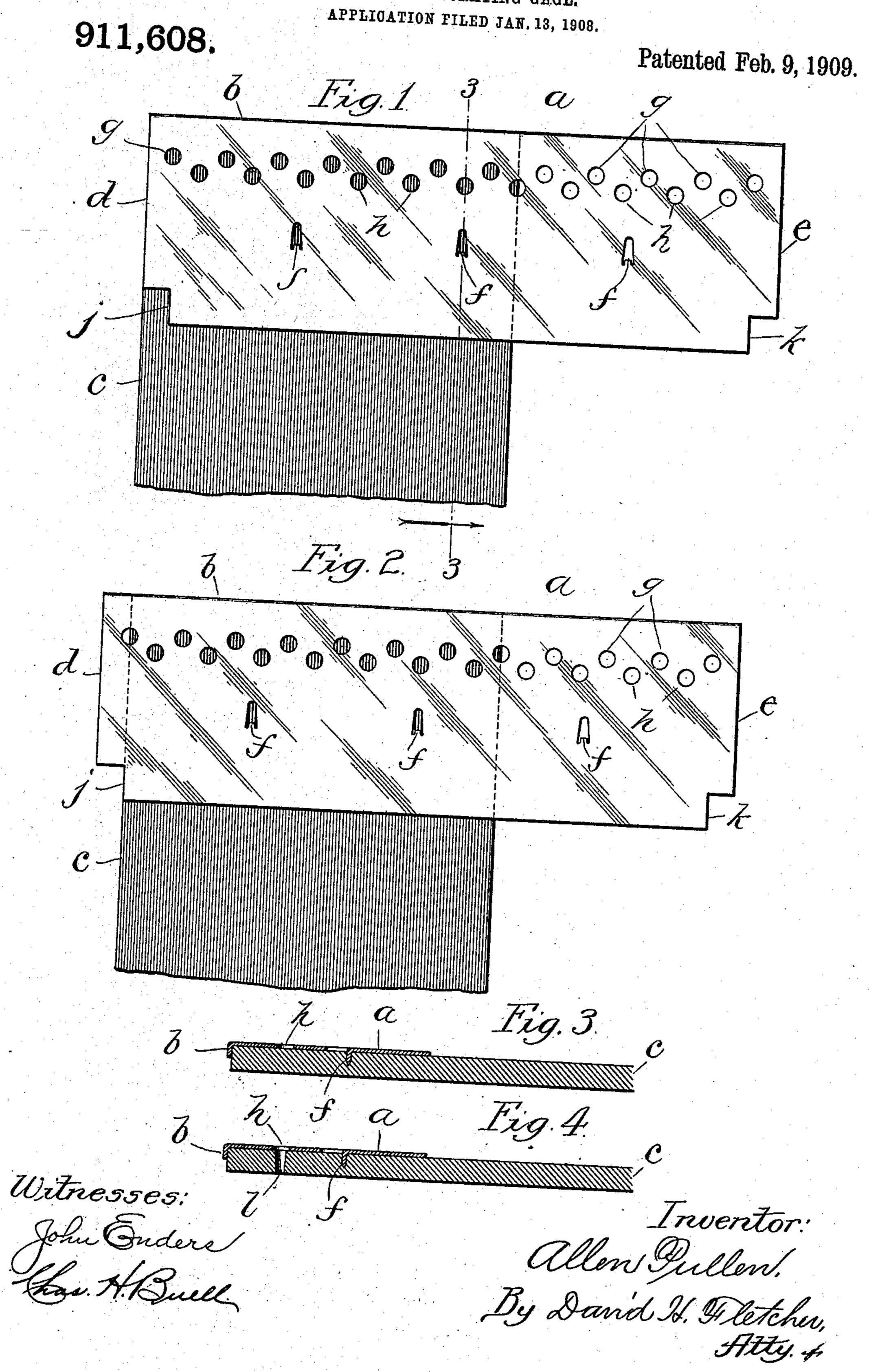
A. PULLEN.

BELT PERFORATING GAGE.

APPLICATION FILED JAN. 13, 1906



## UNITED STATES PATENT OFFICE.

ALLEN PULLEN, OF CHICAGO, ILLINOIS.

BELT-PERFORATING GAGE.

No. 911,608.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed January 13, 1908. Serial No. 410,685.

To all whom it may concern:

Be it known that I, ALLEN PULLEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Belt-Perforating Gages, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which corresponding letters of reference in the different figures indicate like parts.

Great difficulty has heretofore been found in connection with the use of wire lacing for machinery belts, owing to the fact that the perforations in the belts are often improperly located, thereby subjecting portions of the belting to undue stresses and causing the

lacing to be torn out.

The object of my invention is to overcome this difficulty by providing a simple and efficient gage whereby the perforations may be properly located with respect to the stresses to be borne and accurately made when so located;—all of which is hereinafter more particularly described and definitely pointed out in the claims.

In the drawings, Figure 1 is a plan view of my improved gage showing the manner of applying the same to a belt, Fig. 2, is a like view showing a modified application thereof, and Figs. 3 and 4 are sectional views taken upon the line 3, Fig. 1, viewed in the direction of the arrow there shown,—Fig. 3 representing the gage in position before the belt is perforated, and Fig. 4 showing the same as it would appear after the belt is perforated.

Referring to the drawings, a represents generally an elongated plate, preferably formed from sheet-metal, the length of the 40 plate being sufficient to conform to the width of the widest belt to which the user may have occasion to apply it. Upon one edge of said plate which is made straight, is formed a flange b, better shown in Figs. 3 and 4, which is preferably extended throughout the length of the plate to form an abutment to bear against one of the ends of the belt in the manner indicated in the drawings. The

In order to hold the plate securely in the desired position, I provide a plurality of prongs or spurs f, upon its inner face which are, by preference, cut from the plate and bent at right angles thereto, as shown.

edges of the ends de respectively are made

In perforating a belt for use with wire

lacing, it is of the utmost importance that the perforations should not only be in alinement but that the distance thereof from the ends of the belt to be joined should 60 bear a given ratio to the thickness of the latter. In the example shown, I have provided two rows of perforations g and h respectively, in the plate a, which are intended to serve as guides for locating the perfora- 65 tions in belts of varying thickness. In belts of a predetermined thickness, the guide holes g should be employed; while in thicker ones the holes h should be used. It will be noted, in the example shown, that the holes g and h 70 are staggered with respect to each other. The purpose of this is to locate the second row of holes at the proper distance from the end of the belt while at the same time properly disposing the end holes at requisite 75 distances from the opposite edges thereof. With this disposition, it becomes necessary to vary the endwise adjustment of the plate for the two sets of holes. In applying the device, if the holes g are to be used as a guide, 80 then one of the ends d should be placed flush with the edge of the belt, as shown in Fig. 1. This causes the end holes g to be located at proper and equal distances from the edges of the belt. As a guide to the use of 85 the holes h, I cause notches j k to be formed in the respective ends of the plate, one of which may be placed flush with one edge of the belt as shown in Fig. 2.

When the plate is properly adjusted for 90 either set of holes, the spurs f are driven into the leather and the perforations made by means of a suitable punch through the openings desired. In Fig. 4 a perforation l is shown in registration with one of the open-95

It will be seen from the foregoing that the gage may be applied to belts of varying width and adjusted to either edge according as the user may be right or left-handed.

Having thus described my invention, I

1. A belt perforating gage comprising a sheet metal plate having a guiding guard upon one edge to engage the end of the belt, 105 said plate having a plurality of series of openings therein, each series being parallel to said edge and rigid spurs projecting from the inner face of said plate to enter the body of the belt to hold said plate in position 110 during the operation of punching the belt.

2. A belt perforating gage, comprising a

sheet metal plate having a guiding guard upon one edge to engage the end of the belt, rigid spurs projecting from the inner face of said plate, a plurality of series of openings in said plate, each series of which is arranged parallel to said guiding guard, the distance of each series from the guard corresponding substantially to the thickness of a belt to be punched, and notches in the end of said plate, the depth of which corresponds to the distance between the side edge of the belt

and the first opening of a predetermined series after the first.

In testimony whereof, I have signed this specification in the presence of two sub- 15 scribing witnesses, this ninth day of January 1908.

ALLEN PULLEN.

Witnesses:

D. H. FLETCHER, CARRIE E. JORDAN.