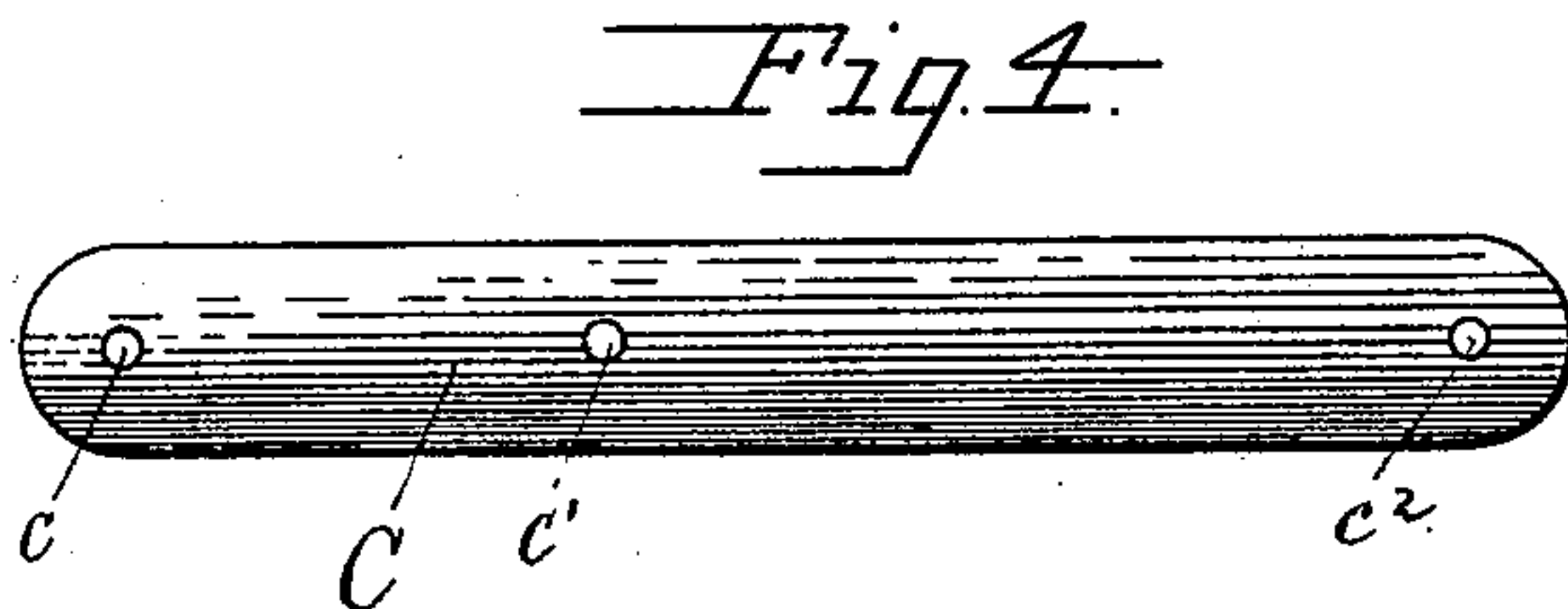
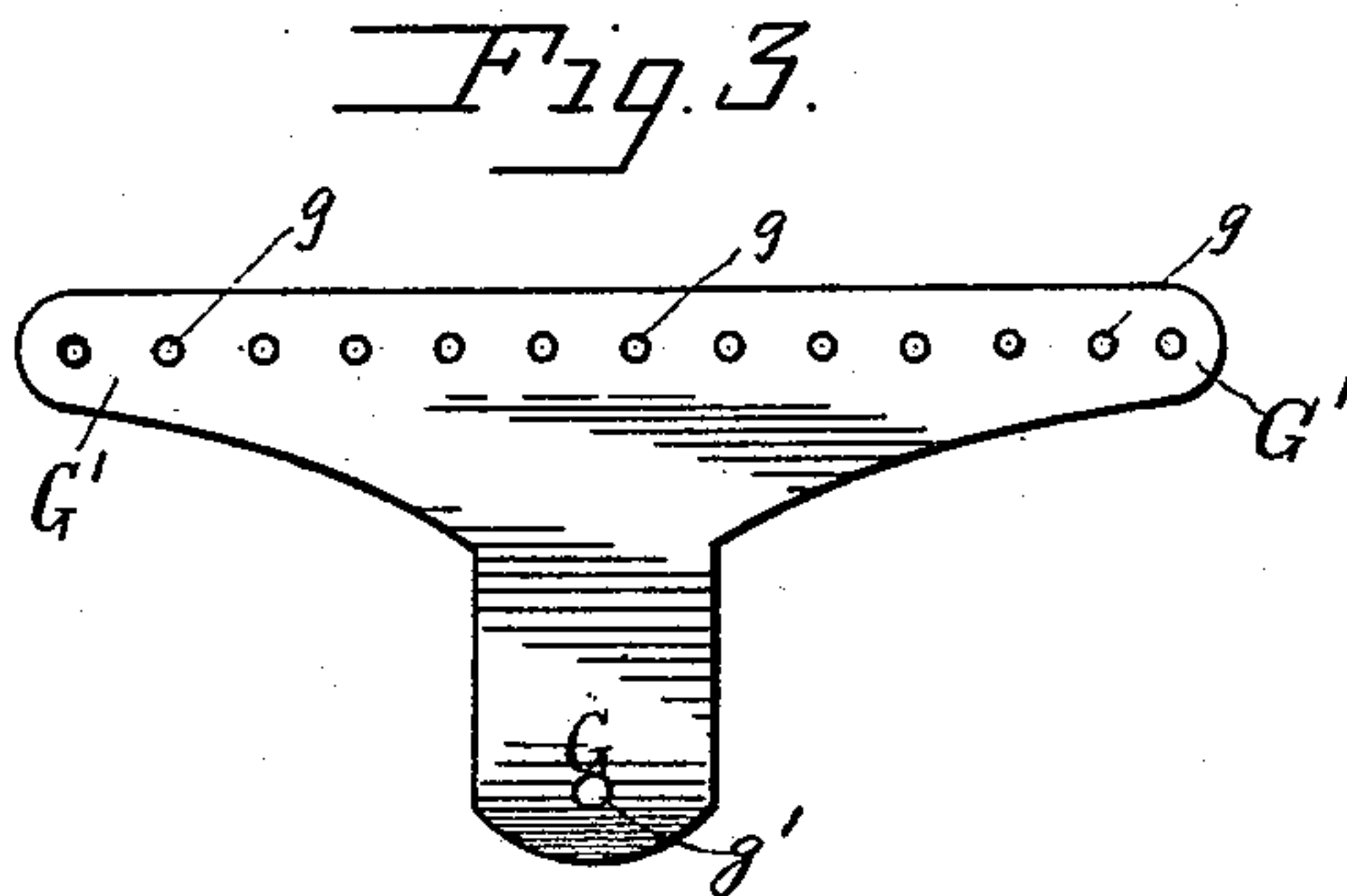
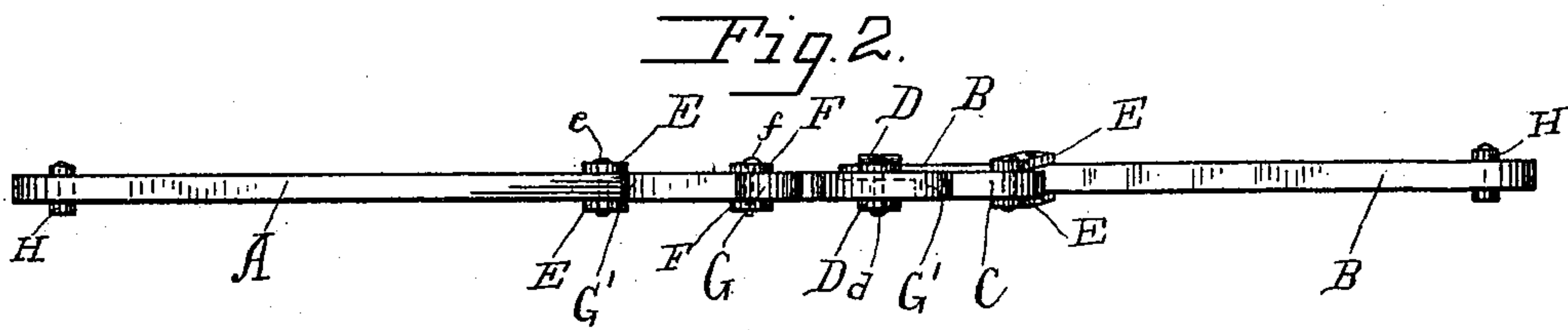
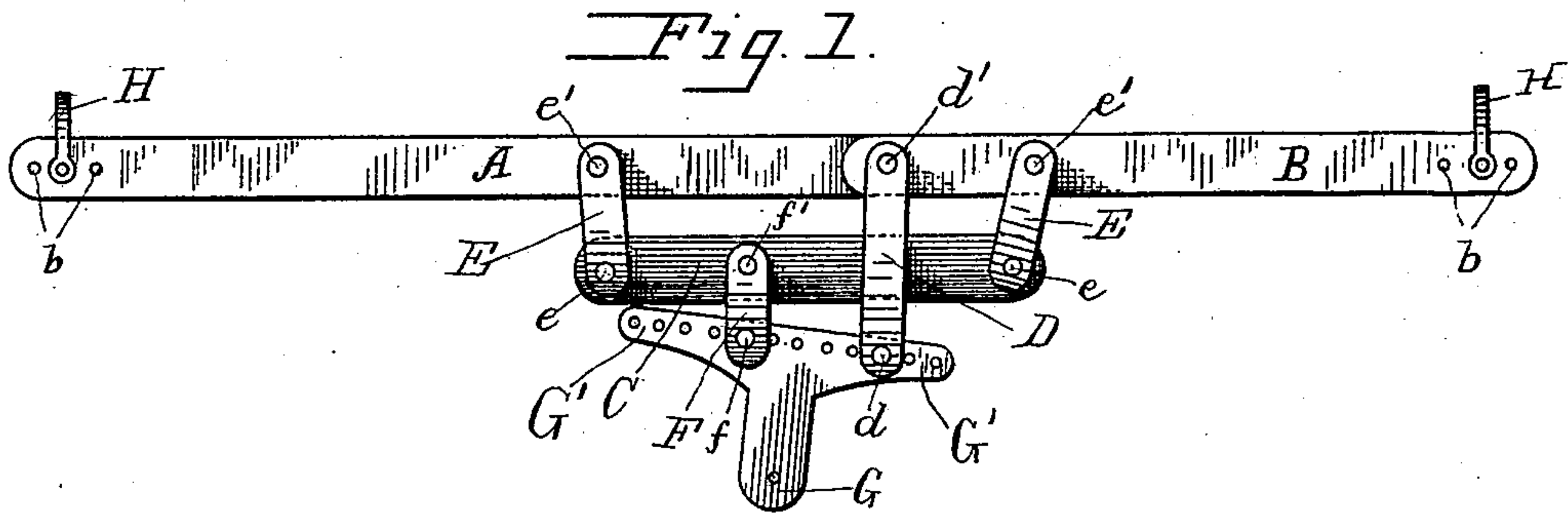


(No Model.)

A. G. BROWN,
DRAFT EQUALIZER.

No. 395,874.

Patented Jan. 8, 1889.



Witnesses,
R. A. Bakerson,
William Gelston.

Inventor,
Alfred Giltas Brown
By
E. N. Gelston
his Attorney.

UNITED STATES PATENT OFFICE.

ALFRED GILBERT BROWN, OF EGAN, DAKOTA TERRITORY.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 395,874, dated January 8, 1889.

Application filed October 25, 1888. Serial No. 289,094. (No model.)

To all whom it may concern:

Be it known that I, ALFRED GILBERT BROWN, a citizen of the United States, residing at Egan, in the county of Moody, Territory of Dakota, have invented certain new and useful Improvements in Draft-Equalizers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to draft-equalizers; and its objects are, first, to effectively distribute the power applied to the load to be moved; second, to provide against frictional absorption of exerted force; third, to dispose the parts correlatively so that they will severally assume and maintain any position caused by the initial movement; fourth, to provide for such interdependence of the parts that there shall be a minimum wear of the material; fifth, to adjust the parts so that the slightest obstacle or undue strain of the running-gear shall be equally distributed to the draft-animals, and, sixth, to attain these ends with structural simplicity and economy. I accomplish these purposes by the device illustrated in the accompanying drawings, in which—

Figure 1 represents a plan view of a draft-equalizer constructed according to the principles of my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a plan view of the wearing-plate, and Fig. 4 is a plan view of the intermediate eveners.

The same designations indicate corresponding parts in all the views.

It is a fact well known to those engaged in utilizing horses that they differ in strength as much as men. As we distribute work among men according to their mental and physical qualities, so we should select among animals only those fitted for the special character of work to be done. Indeed, among horses employed in the same kind of work the allotted share of each should be prescribed according to his ability. To do this automatically, so that when each horse does his full duty the aggregate power applied shall equal the work to be done is therefore the aim of my invention. The principle underlying my present invention is, however, identical

with that involved in the construction shown in Patent No. 379,932, granted to me on the 27th day of March, 1888.

Two levers, A B, (sustaining to each other the proportion of one-half to five-eighths of an inch,) are pivotally joined by the pin d' , which also serves to connect thereto the hammer-strap D, (that is preferably one-eighth by one and one-half inch,) the other end of which is connected by the pin d to the rim G' of the wear-plate G, which is for this purpose provided with a series of perforations, g . In the same series of perforations g the hammer F (preferably three-sixteenths by one and one-half inch) is variably adjusted by the pin f , the other end thereof being joined to the lever C by the pin f' , that passes through the perforation c' , that is one-third nearer to c than it is to c^2 . The ends of the lever C are joined by the pins e to the pull-straps E, whose other ends are severally joined to the levers A B by the pins e' , distant from the pin d' , respectively, one-third and one-fourth the length of the lever A B. Clevis-hooks H, inserted variably in the perforations g , serve to apply the draft, one horse being attached to the lever B and three horses to the lever A.

The relative adjustment of the parts is such that the duty required of each horse in pulling the load secured to the wear-plate G (by a clevis whose inner end fits in the perforation g') shall be proportionate to his strength.

Having thus fully described my invention, what I claim is—

As a new article of manufacture, the draft-equalizer herein described, consisting of the unequal levers A B, pivotally secured to each other, having terminal appliances for attaching the draft-animals, the lever C, whose ends are respectively joined to the levers A B by the pull-straps E, as shown, and the wear-plate G, to whose rear end the load is secured, and the forward end, G' , whereof is secured, respectively, to the levers A B C by the hammer-straps D F, as shown and described, and for the purpose set forth.

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

ALFRED GILBERT BROWN.

Witnesses:

GEORGE M. SMITH,
A. A. SPRAGUE.