No. 637,329. Patented Nov. 21, 1899.

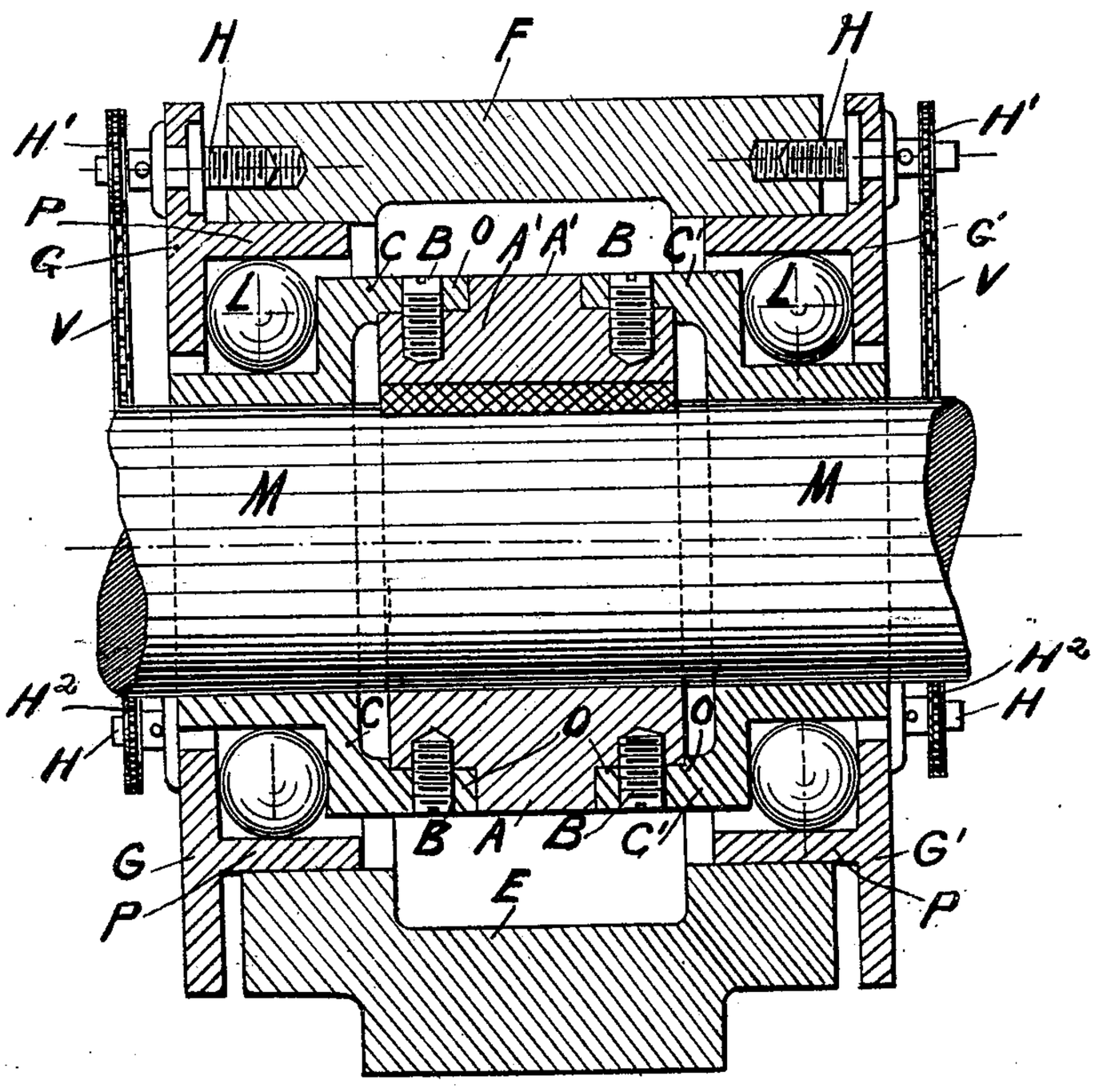
A. FEIX.

BALL BEARING.

(Application filed Oct. 11, 1898. Renewed Sept. 28, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.



WITNESSES:

Wm. D. Bell.

Jas. B. Newton.

INVENTOR:

Alois Feix

by

Gartner & Stewart Attys

No. 637,329. Patented Nov. 21, 1899.

A. FEIX.

BALL BEARING.

(Application filed Oct. 11, 1898. Renewed Sept. 28, 1899.)

(No Model.) 2 Sheets—Sheet 2.

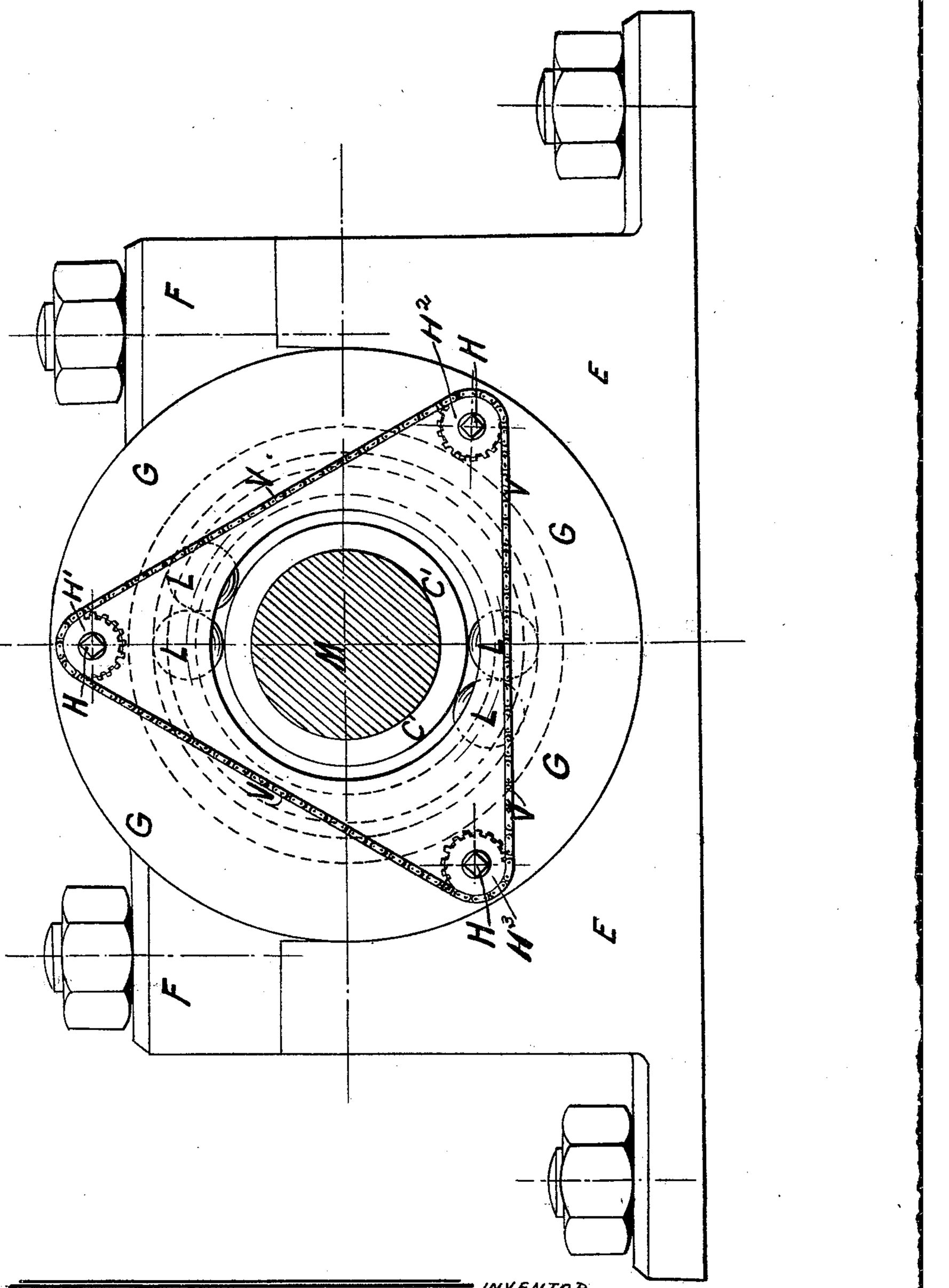


Fig. 2.

WITNESSES:

Wm. D. Bell.

Jas. B. Newton.

INVENTOR:

Alois Feix

by

Gartner & Attorneys

UNITED STATES PATENT OFFICE.

ALOIS FEIX, OF LE PUY, FRANCE.

BALL-BEARING.

SPECIFICATION forming part of Letters Patent No. 637,329, dated November 21, 1899.

Application filed October 11, 1898. Renewed September 28, 1899. Serial No. 731,979. (No model.)

To all whom it may concern:

Be it known that I, ALOIS FEIX, engineer, a citizen of France, residing at Le Puy, Haute-Loire, in the Republic of France, have invented an Improvement in Ball-Bearings, of which the following is a specification.

This invention relates to antifriction-bearings for shafts, and particularly for horizontal shafts; and the object of the invention is to provide an improved device of this nature which shall be simple in construction, as well as strong and durable.

The invention consists in the improved ball-bearing for shafts and in the combination and arrangement of its various parts, substantially as will be hereinafter fully described and finally embodied in the claim.

The invention is fully illustrated in the accompanying drawings, wherein corresponding parts are indicated by like letters of reference, and wherein—

Figure 1 is a vertical sectional view of my improved antifriction-bearing, showing the same as applied to a horizontal shaft; and Fig. 2 is a view in elevation of the said bearing.

In said drawings the letter M indicates a revoluble horizontal shaft suitably supported, as hereinafter particularly described, in a base or pedestal comprising two portions E F, both bolted together, and the latter being adapted to be secured in place, as desired, by means of bolts, &c. A indicates a collar which is keyed upon said shaft within said pedestal, and it is provided with a centrally-disposed peripheral flange A′. C C′ designate two inner ball-races disposed one upon each side of said collar and secured upon the latter by means of an inwardly-projecting flange O, surrounding the reduced portion of said collar and through which and into the collar project set-screws B.

G G′ indicate two outer ball-races, each of which is provided with a peripheral flange P and projecting a short distance into the pedestal, forming, with its respective inner ball-race, an annular ball-chamber.

The outer ball-races are rendered adjustable by means of set-screws H, which project through them and extend into the pedestal. These set-screws are disposed one upon the section F of said pedestal and the other two upon the section E in substantially triangular arrangement, and each has a squared free or protruding end which is adapted to receive a key for manipulating it.

The several set-screws H carry, rigidly connected therewith, pinions H′ H^2 H^3, with the teeth of which an endless chain V is in engagement. By the arrangement just referred to it is only necessary to apply the key to one of the set-screws in order to manipulate the others. Furthermore, the adjustment will be uniform at all points.

L designates the balls, which are situated and which are adapted to roll in said ball-chambers. It is obvious that other substantially similar antifriction devices may be substituted for said balls.

The operation of this device will be apparent without description.

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

In an antifriction-bearing, the combination, with a base or pedestal, of a revoluble shaft penetrating the same, a collar keyed on, and revoluble with, said shaft within said base or pedestal, inner ball-races arranged one on each side of said collar and each provided with a flange surrounding, and secured to, said collar, outer ball-races arranged one on each side of, and projecting into, said pedestal, balls arranged between said ball-races, set-screws adjustably securing said outer ball-races to the pedestal, pinions carried by said set-screws and an endless chain engaging the pinions for the set of set-screws and each outer ball-race, substantially as described.

In testimony that I claim the foregoing I have hereto set my hand this 25th day of August, 1898.

ALOIS FEIX.

Witnesses:
C. BLANDIN,
MARIUS VACHON.