

**No. 640,751.**

**Patented Jan. 9, 1900.**

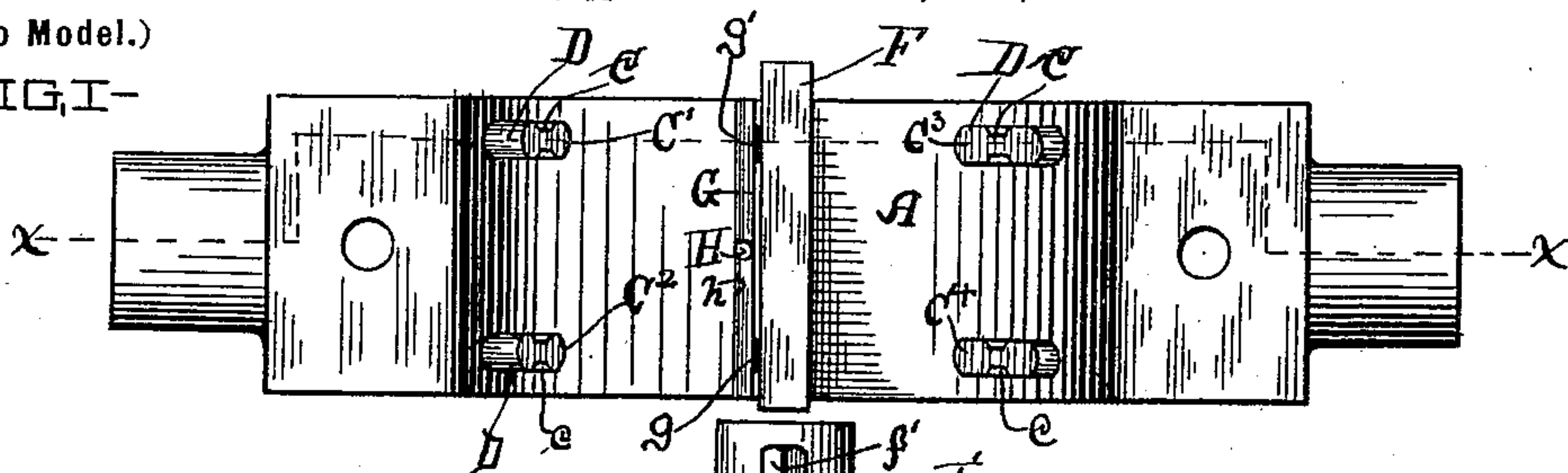
**T. CORWIN.**

### DEVICE FOR TRUING WRIST PINS.

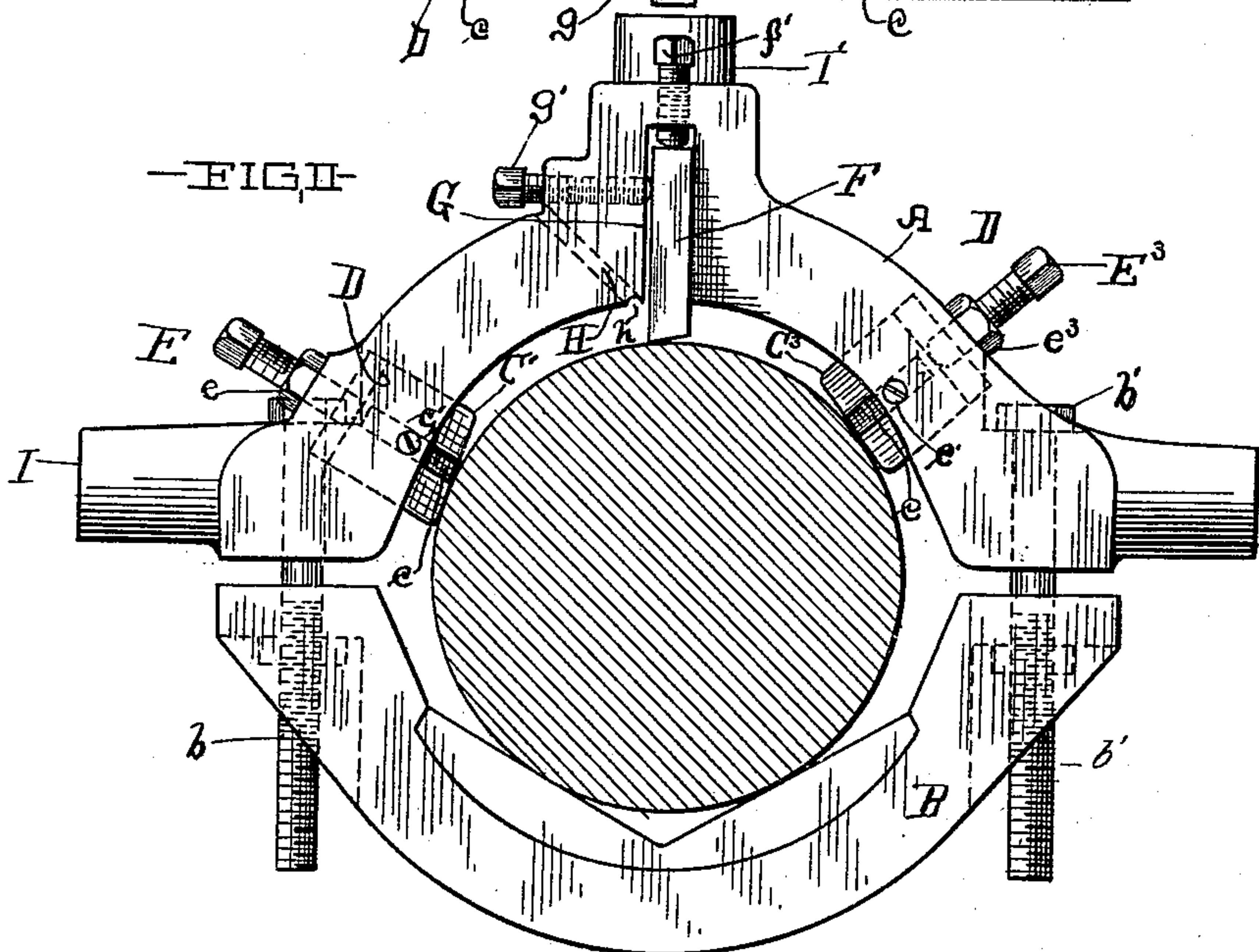
(Application filed Mar. 13, 1899.)

(No Model.)

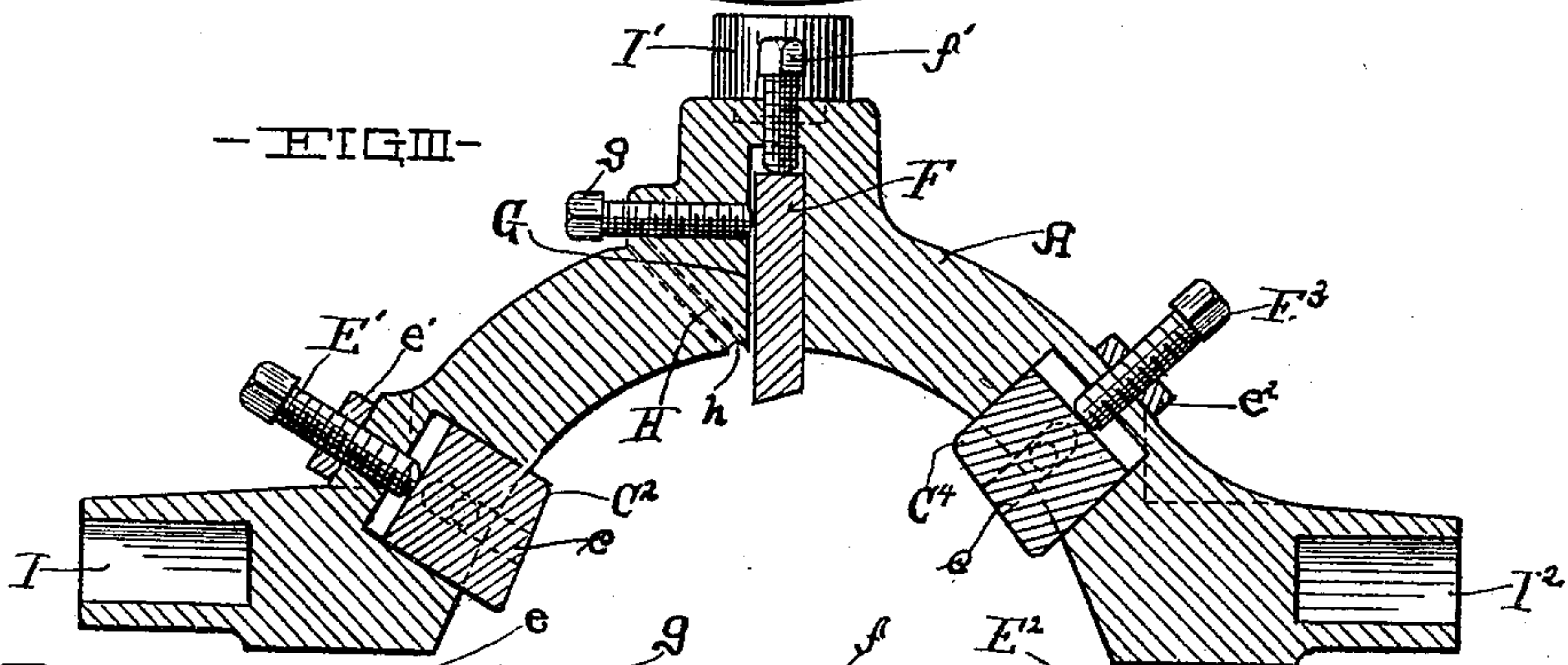
-FIG. I-



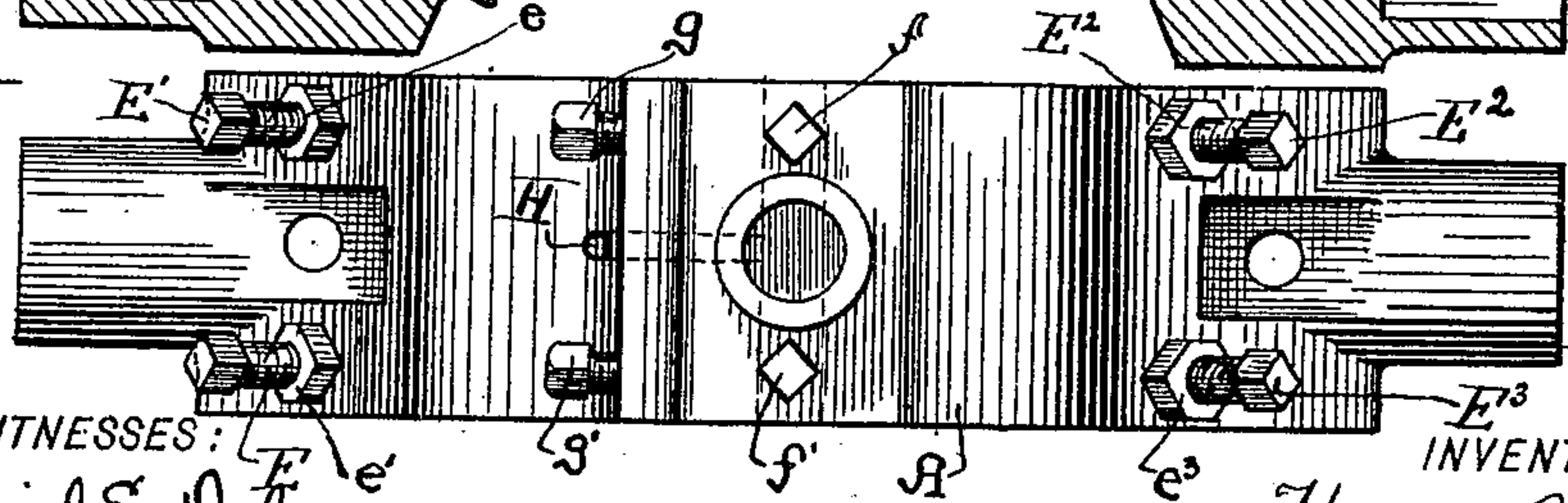
-FIG. II-



- FIG. -



-FIG. IV-



**WITNESSES**

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# UNITED STATES PATENT OFFICE.

THOMAS CORWIN, OF CLEVELAND, OHIO.

## DEVICE FOR TRUING WRIST-PINS.

SPECIFICATION forming part of Letters Patent No. 640,751, dated January 9, 1900.

Application filed March 13, 1899. Serial No. 708,862. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS CORWIN, a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and  
5 useful Improvements in Devices for Truing Wrist-Pins; and I do hereby 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 pertains to  
10 make and use the same.

My invention relates to devices for truing or refinishing the crank-pins or wrist-pins of locomotive drive-wheels after the same have become worn.

15 My invention consists in the peculiar construction of the device, whereby the pins can be trued without removing them from the drive-wheel and whereby the pins are trued according to their wear.

20 My invention also consists in peculiarities of construction which will be hereinafter fully set forth and claimed.

In the drawings, Figure I is a view in elevation looking at the interior of the adjusting and cutting or scraping portion of my device. Fig. II is a view in elevation illustrating my device as applied to a wrist-pin or crank-pin when in operation. Fig. III is a sectional view taken on line *xx*, Fig. I. Fig.  
30 IV is a top plan view of my device.

In the drawings, A represents one member of my device, which is constructed of metal and preferably constructed of a compound of aluminium metal both for strength and light-  
35 ness. B represents the other member, which is secured adjustably to the member A by means of clamp-bolts *b b'*. The clamp-bolts *b b'* pass through holes formed in both ends of the member A and the member B, respectively.  
40

*C'*, *C*<sup>2</sup>, *C*<sup>3</sup>, and *C*<sup>4</sup> represent adjusting and centering dogs which are located in the member A at both sides of the center of said member. Two of the centering-dogs aforesaid  
45 are located at either side and are disposed so as to occupy a position near the outer and inner face of said member. The centering-dogs *C'*, *C*<sup>2</sup>, *C*<sup>3</sup>, and *C*<sup>4</sup> are grooved in their face, as at *c*, the said grooves *c* extending  
50 from the engaging face of said centering-dogs back to a point at or near the inner end of the same. These grooves *c* are engaged by

set-screws *c'*, which pass through the face of the member A and act to hold the said centering-dogs from falling out from said member. The centering-dogs *C'*, *C*<sup>2</sup>, *C*<sup>3</sup>, and *C*<sup>4</sup>  
55 are so fitted in their respective ways D that they have free sliding movement therein and are adjusted toward the center by means of set-screws *E*, *E'*, *E*<sup>2</sup>, and *E*<sup>3</sup>, respectively, 60 the said set-screws being preferably provided with jam-nuts *e*, *e'*, *e*<sup>2</sup>, and *e*<sup>3</sup>, respectively.

F represents a scraping-tool which is located approximately between the centering-dogs *C'*, *C*<sup>2</sup>, *C*<sup>3</sup>, and *C*<sup>4</sup> and preferably nearer 65 to the centering-dogs *C*<sup>3</sup> and *C*<sup>4</sup>, so that the scraping or cutting edge of the same will be approximately centrally between the bearing portions of said centering-dogs. The scraping-tool F is held in position in a slot G, which  
70 is formed across the member A, by means of set-screws *g g'* and is adjusted toward the center of the device by means of set-screws *f f'*, which pass downwardly into the slot G.

H represents an oil-duct which extends 75 from the upper portion of the member A through and into the inner portion of the same and approximately at a point near the cutting or scraping edge of the tool F, thus acting as a means for feeding the lubricant in  
80 ducts on said scraping or cutting edge during the operation of the device. A groove *h* may be provided, which communicates with the lower end of the duct H for distributing the oil or lubricant along the scraping or cut-  
85 ting edge of the tool.

I, I', and I<sup>2</sup> represent socket-lugs formed, respectively, at both sides and at the top of the member A. These lugs are provided with sockets for the reception of a bar or short lever for the purpose of operating the device. While I have illustrated and set forth three of these socket-lugs, it will be understood that but one of the said lugs is essential, the other two being provided as a matter of convenience. I have described these lugs as being  
95 formed on the member A; but they may be placed on either member or on both members.

The member B has a V-shaped groove formed upon its inner surface. It thus affords a uni-  
100 versal bearing-surface for cylindrical bodies of different diameters and permits of the device being readily centered upon the wrist-pin to be operated upon. The bearing-sur-



face of this member may be covered with rawhide or some soft material, so as to cushion the device in its operation and to aid in polishing and finishing the wrist-pin.

5 The operation of my device is as follows: The scraping-tool F, being properly sharpened and trued, is placed in its slot or recess G, and the device is placed over the wrist-pin, as illustrated in Fig. II of the drawings.  
 10 The device is first roughly adjusted by operating the bolts *b b'* and is then centered by adjusting the centering-dogs *C'*, *C<sup>2</sup>*, *C<sup>3</sup>*, and *C<sup>4</sup>*. The tool F is then suitably adjusted by means of the set-screws *f f'* and *g g'*. After the device  
 15 vice has been properly centered and the scraping-tool adjusted a bar is placed in one of the sockets and the device is turned around the wrist-pin, scraping the same until it is trued, the centering-dogs and the scraping-tool being  
 20 adjusted from time to time as the work proceeds.

What I claim is—

1. A portable device for truing wrist-pins, comprising a tool-carrying head, having a  
 25 crutch or V-shaped groove upon its interior surface for centering and affording a universal bearing for cylindrical bodies of varying diameters; centering-dogs radially adjustable in said head; a scraping-tool adjustable in a  
 30 guideway in said head; and lugs located upon the exterior of said head, substantially as described and for the purpose set forth.

2. A portable device for truing wrist-pins consisting of a tool-carrying head, comprising  
 35 two coöperating and mutually-adjustable members, one of said members having a V-shaped groove upon its interior for centering and affording a universal bearing-surface for cylindrical bodies of varying diameters; and  
 40 the other member being provided with radially-adjustable centering-dogs, and an ad-

justable scraping-tool, substantially as described and for the purpose set forth.

3. A portable device for truing wrist-pins, consisting of a tool-carrying head, comprising 45 two coöperating and mutually-adjustable members, one of said members having a V-shaped groove upon a portion of its interior surface for centering and affording a universal bearing-surface for cylindrical bodies of 50 varying diameters, the other member being provided with an adjustable scraping-tool operating in a guideway in said member, and with two pairs of centering-dogs radially adjustable in said member one pair of said centering-dogs being located at each side of said  
 55 scraping-tool, substantially as described and for the purpose set forth.

4. A portable device for truing wrist-pins, consisting of a tool-carrying head, comprising 60 two coöperating and mutually-adjustable members, one of said members having a V-shaped bearing-surface, and the other member being provided with a scraping-tool located in a guideway in said member, set-screws for 65 adjusting said scraping-tool, set-screws for steadying said scraping-tool, a pair of centering-dogs located at each side of said scraping-tool, said centering-dogs being radially adjustable in guideways in said member, set- 70 screws located in back of said member for radially adjusting said dogs, and set-screws located in the side of said member for limiting radial movement of said dogs, substantially as described, and for the purpose set forth. 75

Signed by me at Cleveland, Ohio, this 2d day of March, 1899.

THOMAS CORWIN.

Witnesses:

A. H. PARRATT,  
 W. E. DONNELLY.