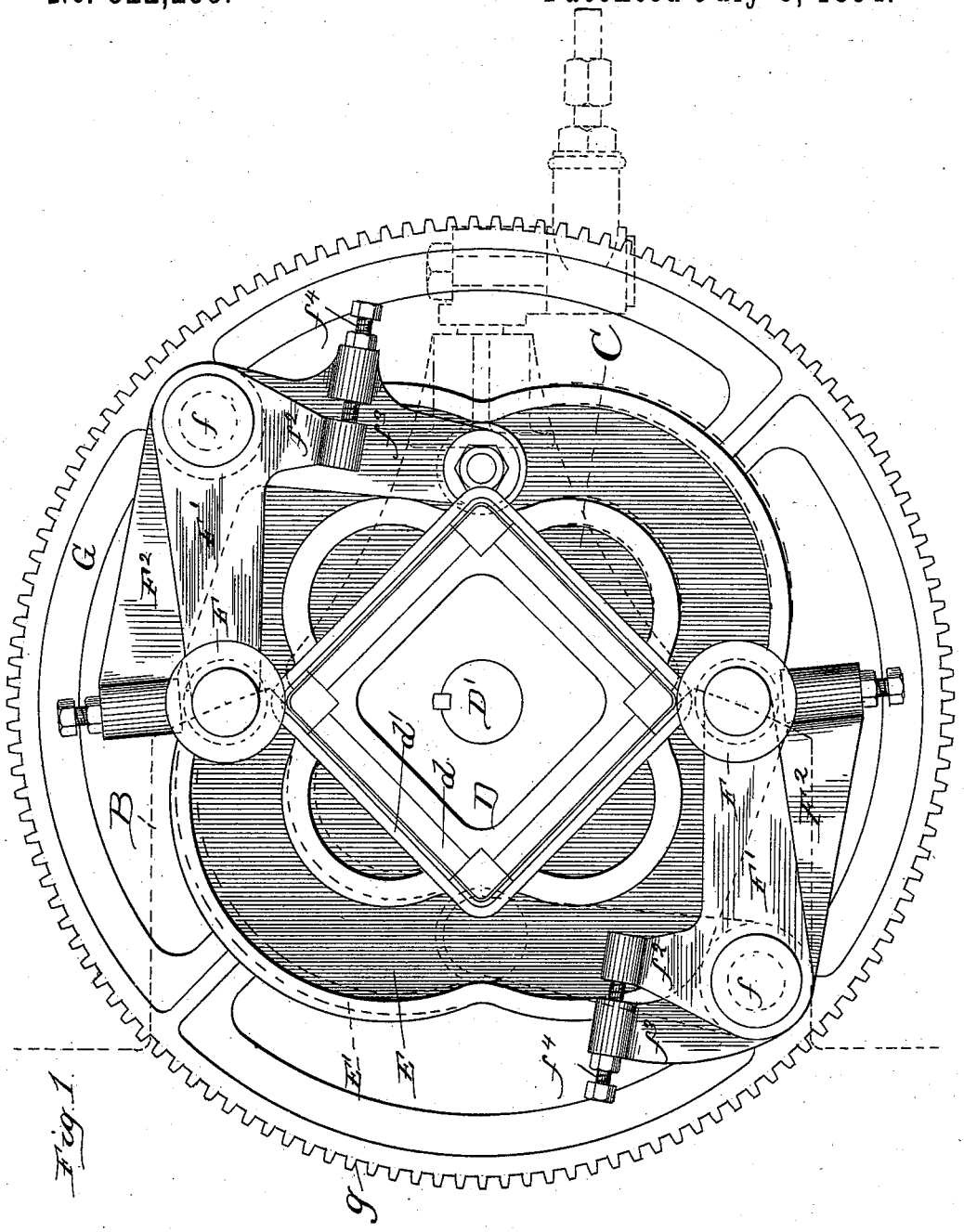
(No Model.) 2 Sheets—Sheet 1.

J. G. HODGSON.

MACHINE FOR ROLLING OR CRIMPING END SEAMS OF SHEET METAL CANS.

No. 522,255. Patented July 3, 1894.



Witnesses:
Lew. C. Curtis
H. W. Munday.

Inventor:
John G. Hodgson
By Munday, Evarts & Adcock
His Attorneys

(No Model.) 2 Sheets—Sheet 2.

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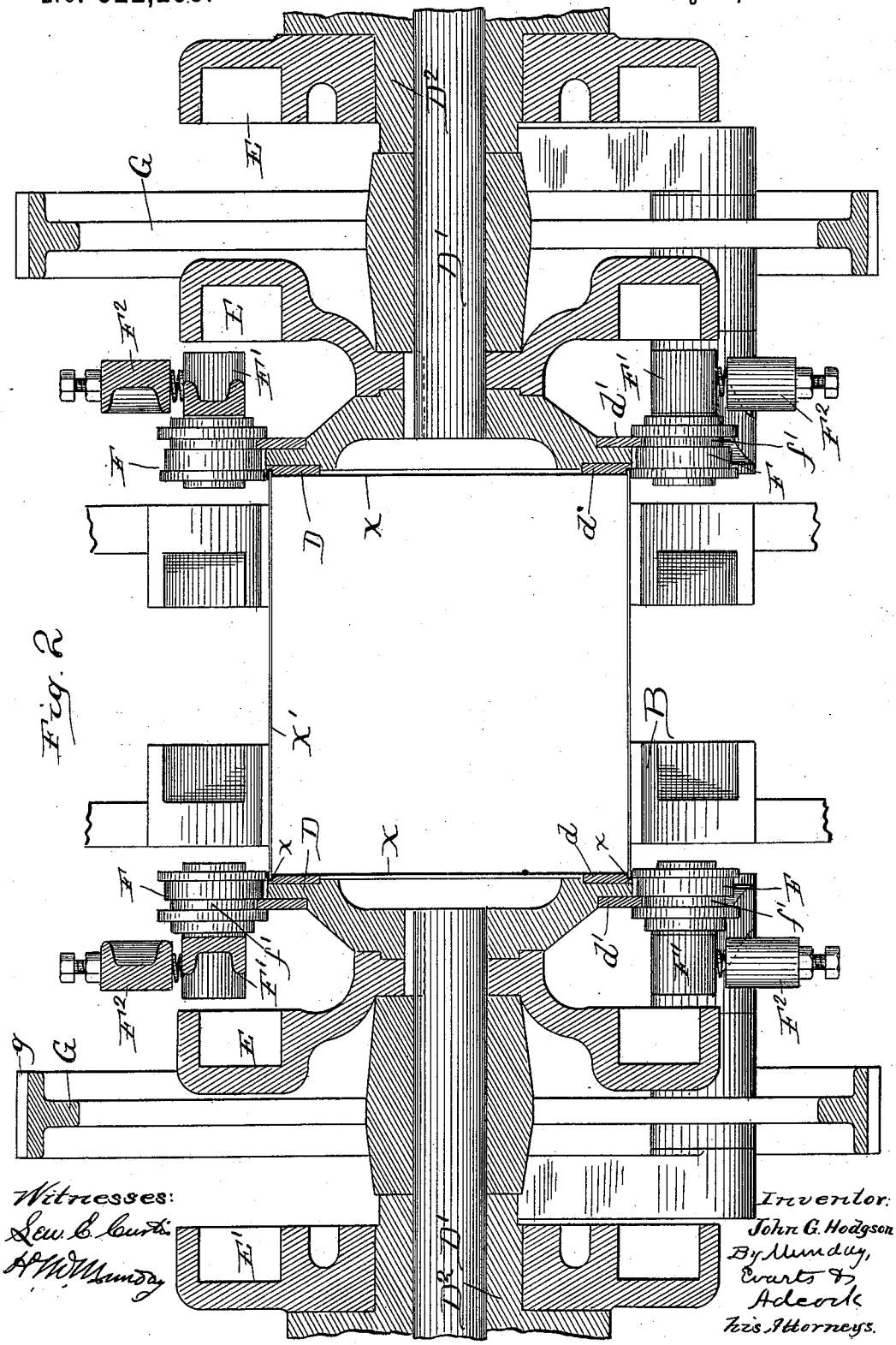

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UNITED STATES PATENT OFFICE.

JOHN G. HODGSON, OF MAYWOOD, ILLINOIS, ASSIGNOR TO EDWIN NORTON, OF SAME PLACE, AND OLIVER W. NORTON, OF CHICAGO, ILLINOIS.

MACHINE FOR ROLLING OR CRIMPING END SEAMS OF SHEET-METAL CANS.

SPECIFICATION forming part of Letters Patent No. 522,255, dated July 3, 1894.

Application filed July 23, 1892. Renewed March 14, 1894. Serial No. 503,556. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. HODGSON, a citizen of the United States, residing at Maywood, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Machines for Rolling or Crimping the End Seams of Sheet-Metal Cans, of which the following is a specification.

My invention relates to machines for rolling or compressing the end seams of sheet metal cans, and it is particularly designed for operation upon the end seams of polygonal-shaped cans having countersunk heads, such for example as petroleum cans.

My present invention is an improvement upon the machine shown and described in the joint application of Edwin Norton, Frank M. Leavitt and myself, filed of even date herewith, Serial No. 503,554.

The object of my present improvement is to provide means for causing the proper registry of the revolving rotary seaming rollers with the inside dies with which such rollers coact, so that the seam or flanges uniting the head and body of the can may be properly rolled, compressed or crimped between the rollers and the dies. This result I accomplish, and herein my improvement consists, by providing the seaming rollers and the inside die around which they revolve with registering guides which fit together and thus insure the proper conjoint action of the seaming roller and die. These interfitting guides preferably consist of a groove formed on one part, and preferably on the seaming roller, and a projecting flange formed on the other part, and preferably on the die, and adapted to fit in the guide groove formed on the seaming roller.

In the accompanying drawings, forming a part of this specification, I have shown only those parts of the machine to which my invention is applied.

For a description of the remaining portion of the machine reference is had to the joint application hereinbefore referred to, and the patent to be granted thereon.

In the drawings Figure 1 is an end or face view of one of the dies and one set of seaming rollers and their operating levers and Fig. 2 is a central section.

In said drawings B, C, represent the pockets or part-molds for holding and supporting the can to be operated upon.

D D are the reciprocating dies which fit within the countersunk heads X of the can X', so as to support the flange or seam x on the inside. This die D has, or should have, a steel operating face d.

F F are rotary crimping wheels or rollers mounted upon levers $F' F^2$ which are pivoted at f to a revolving wheel or carrier G, by means of which these levers and the crimping rollers carried by them are revolved around the can and the dies D D. The crimping rollers F are furnished with a guide f', preferably in the form of a groove, and the dies D are furnished with corresponding guides d', made preferably in the form of a square ring or plate adapted to fit in said guide groove f'. By means of the guides f' d' on the crimping rollers and dies the rollers and dies are made to properly coact together with certainty and regularity, as the rollers are revolved or carried around the can, thus insuring a uniform compression of the seam at all parts.

The carrier or wheel G is made to revolve by the gear teeth g thereon, meshing with a suitable revolving gear in the machine. The reciprocating dies D are carried by a cross head $D' D^2$, which reciprocates in suitable guides on the frame of the machine. The crimping levers $F' F^2$ which carry the rollers F are operated as required by cams E E', which are secured to the cross head $D' D^2$. The two arms $f^2 f^3$ of each of the levers $F' F^2$ are made adjustable in respect to each other by a screw f^4. The two half or part molds B C are made to open and close to receive and discharge the can, as is fully shown and described in my joint application, Serial No. 503,554, before referred to, and to which reference is hereby made, as this part of the machine does not form the subject matter of my present sole invention. The crimping rollers rotate on their own axes by reason of their frictional contact with the can, as they

are revolved or carried around the same by their carrier or wheel G. The crimping rollers are pressed against the seam by means of the cams E E′, which like the dies D D have no revolving movement.

I claim—

1. In a machine for rolling or compressing the end seams of sheet metal cans, the combination with a pair of non-revolving dies adapted to fit within the countersunk heads of the cans and furnished each with a guide, of a pair of revolving carriers G G and seaming wheels or rollers mounted upon said revolving carriers and adapted to be carried around the can thereby, said seaming rollers being furnished with guides engaging the guides on said dies, substantially as specified.

2. The combination with a pair of devices D between which the can is held, a guide d', a seaming roller F and a corresponding guide f' engaging said guide d', a lever F′ upon which said roller F is mounted and a revolving carrier G to which said lever F′ is pivoted, substantially as specified.

3. The combination with a pair of devices D between which the can is held, a guide d', a seaming roller F and a corresponding guide f' engaging said guide d', a lever F′ upon which said roller F is mounted and a revolving carrier G to which said lever F′ is pivoted, and a stationary cam for operating said lever, substantially as specified.

JOHN G. HODGSON.

Witnesses:
H. M. MUNDAY,
EMMA HACK.