

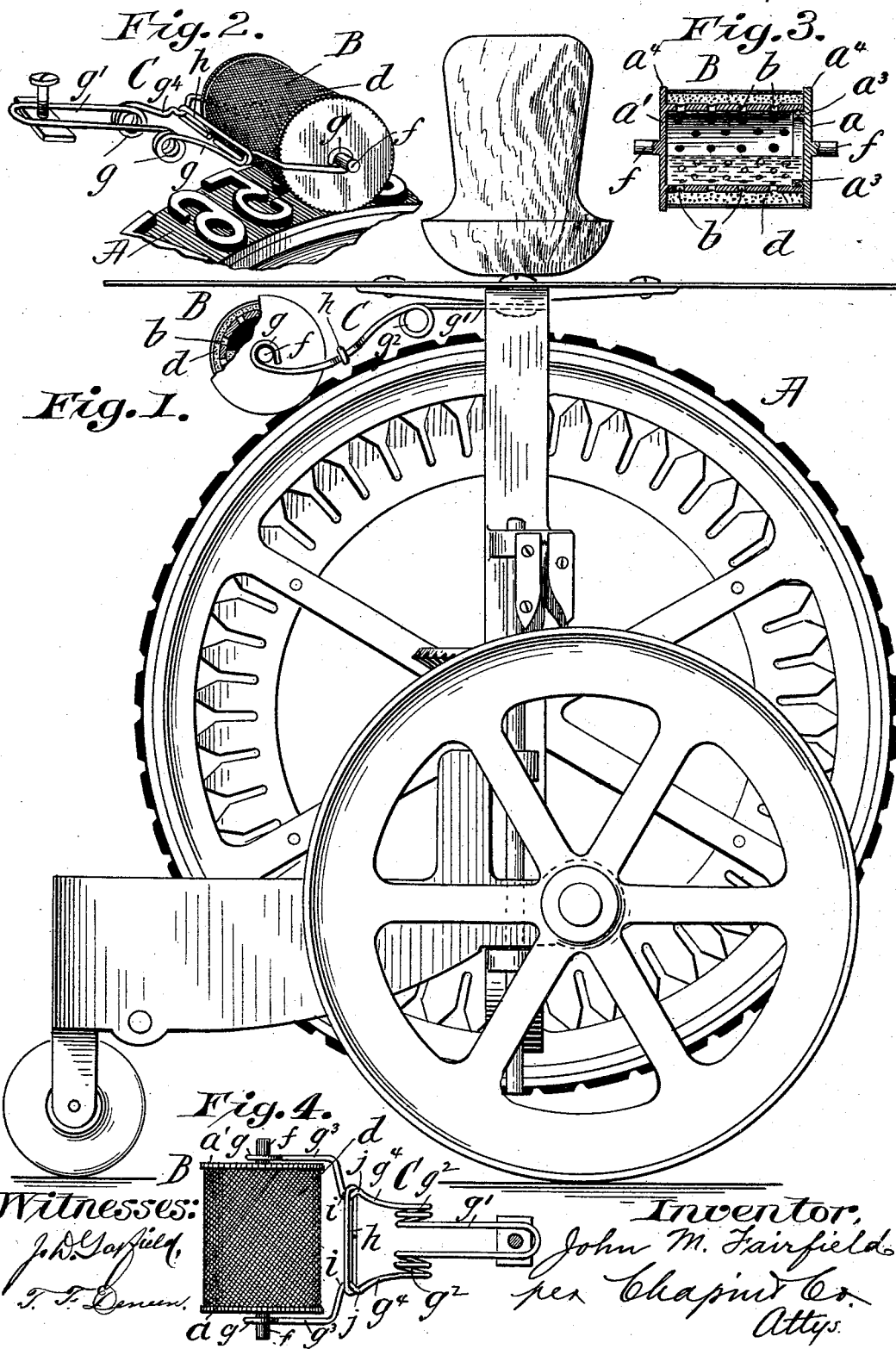
(No Model.)

J. M. FAIRFIELD.

INK ROLLER SUPPORTING DEVICE FOR PRINTING MACHINES.

No. 491,046.

Patented Jan. 31, 1893.



Witnesses:

J. H. Garfield,
J. F. Demer.

Inventor,

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Attys.

UNITED STATES PATENT OFFICE.

JOHN M. FAIRFIELD, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE TYPE WRITING MACHINE COMPANY, OF SAME PLACE.

INK-ROLLER SUPPORTING DEVICE FOR PRINTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 491,046, dated January 31, 1893.

Application filed April 27, 1892. Serial No. 430,893. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. FAIRFIELD, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented new and useful Improvements in Ink-Roller Supporting Devices for Printing-Machines, of which the following is a specification.

The object of this invention is to provide an improved supporting device for the inking roller of the printing machine and consists in the construction and combination of parts all substantially as will hereinafter particularly appear and be set forth in the claim.

In the accompanying drawings the invention is illustrated, and Figure 1 is a side elevation of a printing machine having structural characteristics which are embodied in an invention for improvements in printing machines comprised in Letters Patent of the United States granted to Samuel C. Hurlbut, November 18, 1890, No. 441,568, and showing the improved device of the present invention applied thereto. Fig. 2 is a perspective view of the inking roller and its holder, the former being shown as in its operative relation with the type face. Fig. 3 is a central longitudinal sectional view of the roller. Fig. 4 is a plan view of the roller and its holder.

In the drawings, A, represents the type drum mounted for rotation on the supports therefor, particular description of the manner of mounting the drum and of its mode of operation, being unnecessary, inasmuch as the inking devices are as well applicable to one character of printing machines as another.

B is the inking roller, and C represents the holder therefor. The inking roller consists of a cylindrical shell having at one end a removable head or closing cap, *a*, its other end being provided with a permanent head, *a'*. The said head, *a*, is provided with the annular, externally threaded flange, *a*³, which screw engages, internally, the extremity of the cylindrical shell. Each of the heads is of such a diameter as to constitute flanges, *a*⁴, that are outward extensions beyond the circular wall of the shell. The said circular wall is provided with a series of perforations, *b*, and is surrounded by a pad or banding, *d*, of

absorbent material such as is usual in inking pads, the same preferably comprising an outer layer of ribbon or like fabric. Each of the heads is provided with an axially extended journal-boss or gudgeon, *f*, with which engage the eyes or sockets, *g*, of the holder.

A simple, cheap improved and desirable form of the holder is illustrated in the drawings, and consists of a single piece of spring wire which intermediately thereof is bent into an extended U-form as at *g'*, each of the members intermediately having one or more convolutions, as seen at *g*², thence continued farther away from the throat of the U-portion and in divergent sections, *g*⁴, which are still further continued in the parallel arms, *g*³, having the single end coils to constitute the said eyes, *g*. The holder is by the portion, *g'*, connected to the printing machine adjacent the type drum and by reason of the spring coils, *g*², *g*², it has a spring reaction toward the type-provided rim of the drum whereby the inking roller has the desired yielding bearing thereon. The portions, *g*³, are also adapted to be separated from each other sufficiently outwardly beyond the heads of the rollers to become disengaged from the journals, *f*, of the latter. In order to prevent any accidental separation of the eye-formed arms, *g*³, a clasp, *h*, has an engagement with the separated divergent portions, *g*⁴, of the holder which are between the coils, *g*², and the roller supporting arms. It will be noticed that each of the portions, *g*⁴, has an inwardly deflected formation as seen at *i*, beyond which in the direction toward the coils is an outward deflection as particularly seen at *j*, whereby shoulders are constituted for preventing the displacement of the clasp, *h*, when adjusted. The clasp may be however, forced past the said shoulders, *j*, moving in a direction toward the coils and in their then relations with the angularly arranged members, *g*⁴, they permit the eye-provided arms to be sprung apart for the disengagement of the roller journals. The liquid ink contained within the roller shell is centrifugally thrown through the perforations to be absorbed by the surrounding pad, for automatically maintaining the latter in the required degree of saturation, it being

understood that an ink of a consistency which is suited to the requirements and capabilities of the device is necessarily provided.

What I claim is:—

- 5 The combination with the inking roller substantially as described, of a holder therefor consisting of a single piece of wire having its intermediate portion bent into U-form, each of its side members having one or more con-
10 volutions, g^2 , thence extended from said U-portions in divergent sections, g^4 , each pro-

vided with the depression, i , and shoulder, j , and the said sections continued in the parallel arms, g^3 , with the eyes, g , at their terminals in which the roller-journals are mounted, and 15 the clasp, h , substantially as described and shown.

JOHN M. FAIRFIELD.

Witnesses:

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