(No Model.)

E. L. SHATTUCK.

ATTACHMENT FOR PRINTING PRESS FLIERS.

No. 537,312. Patented Apr. 9, 1895.

Fig. 1.

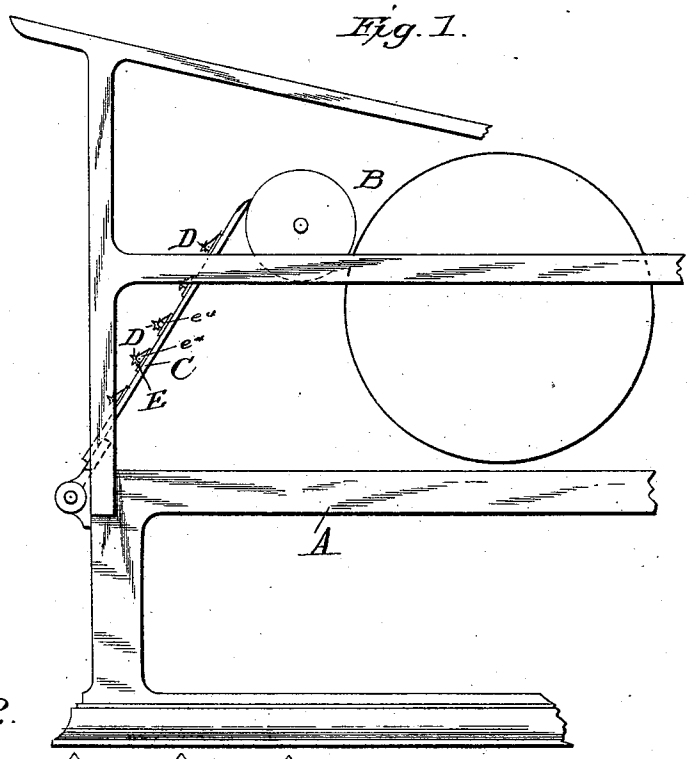


Fig. 2.

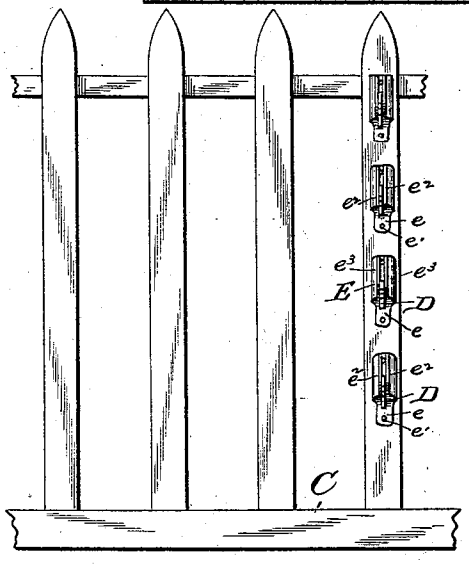


Fig. 3.

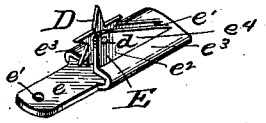


Fig. 4.

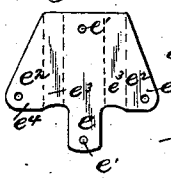
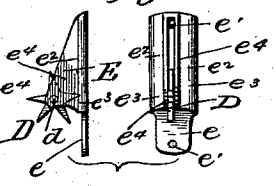


Fig. 5.



WITNESSES
F. L. Ourand.
Henry Smith

INVENTOR
Edwin L. Shattuck
by J. C. Fitzgerald
Attorney

UNITED STATES PATENT OFFICE.

EDWIN L. SHATTUCK, OF BROOKLYN, NEW YORK.

ATTACHMENT FOR PRINTING-PRESS FLIERS.

SPECIFICATION forming part of Letters Patent No. 537,312, dated April 9, 1895.

Application filed January 12, 1895. Serial No. 534,675. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. SHATTUCK, a citizen of the United States, residing at Brooklyn, in the county of Kings, State of New York, have invented certain new and useful Improvements in Attachments for Printing-Press Fliers; 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 appertains to make and use the same.

My invention has relation to attachments for printing press fliers and the object of my invention is to produce a device of this kind that is simple and inexpensive, as well as efficient and durable in use; and to these ends the novelty consists in a bearing plate for attachment to the surface of the flier fingers, said plate having integral inclined supports in which a star wheel is journaled, all of which will be hereinafter more fully described and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a portion of a printing press showing a flier provided with my invention. Fig. 2 is a front elevation of a flier showing the friction star rollers in place on one finger of the flier. Fig. 3 is a perspective view of my improved roller. Fig. 4 is a developed view of the roller bearing plate. Fig. 5 shows a front and side elevation of my device ready for attachment to the flier.

Referring to the drawings, A is a printing press, B the cylinder, and C the flier of the usual construction. The flier is provided with a series of star wheels or pointed friction rollers D, for a well known purpose and arranged on the flier fingers.

The mechanism thus far described is old and well known, and my invention resides entirely in the construction of the star friction rollers D which will now be described.

The friction rollers or star wheels D are each mounted on an axis or pintle pin *d* which is carried in a bearing plate E, constructed as follows: This bearing plate consists of a piece of sheet metal having a flat portion *e* provided with holes *e'* by which it is secured to the flier fingers. This bearing plate has also a pair of lateral wings, e^2, stamped from the same piece of sheet metal as the flat portion *e*, that is to say, integral with the flat portion. These wings taper toward the forward ends and are bent inward and on top of the flat portion, *e*, so as to form parallel portions, e^3, which are pressed down in close contact with the said flat portion *e*. The ends of the lateral wings e^2 are bent upward at right angles to the portions e^3 to form supports, e^4, inclined from the forward end, in which the star rollers D are journaled, as will be fully understood from the drawings.

In use my attachment is secured to the upper surface of the flier fingers, by small screws or brads, with the upwardly beveled portions in the direction of the travel of the paper as it is delivered from the press the point ends of the inclined wings of my attachment being toward the free ends of the flier fingers, as shown. Ordinarily printing presses are provided with cords or bands running over small pulleys between the flier fingers which are adapted to hold the printed sheet just above the surface of the fly until it is in the proper position to be carried over, but in many of the presses of the older style of make, the flies are made together with bars or wood strips, and in this class of presses the printed sheet slides down on the fly, and it is in this style of press flies that my attachment is especially advantageous over any other known construction of like devices, as in my device the star wheel supports being beveled in the direction of the travel of the paper, it is impossible for the sheet to catch or clog against said supports as it comes from the press.

I am aware of the construction in the patent to Hyde *et al.*, No. 324,939, wherein is shown a star wheel mortised in the flier fingers, or attached on rods therebetween, constructions both expensive and cumbersome, which I do not claim, but

What I do claim as new, and desire to secure by Letters Patent, is—

1. As an article of manufacture, an attachment for printing press fliers consisting of a star wheel and two supporting wings the wings being upwardly beveled in the direction of the travel of the paper, and devices for securing the wings to the flier, substantially as described.

2. As an article of manufacture, an attachment for printing press fliers, consisting of a star wheel and two supporting wings rising

from a bearing plate, the wings being integral with said plate and beveled in the direction of the travel of the paper, said plate being adapted to be secured to the surface of the flier fingers, substantially as described.

3. As an article of manufacture, an attachment for printing press fliers, consisting of a star wheel, two supporting wings, and a bearing plate provided at opposite ends with holes for securing it to the flier, said supporting wings and bearing plate being stamped from one piece of metal, the wings being bent inward onto said plate and then upward, forming supports inclined upward in the direction of the travel of the paper in which supports the axis of the star wheel is carried.

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

EDWIN L. SHATTUCK.

Witnesses:

W. H. TEN EYCK,

JULIUS SCHAEFER.