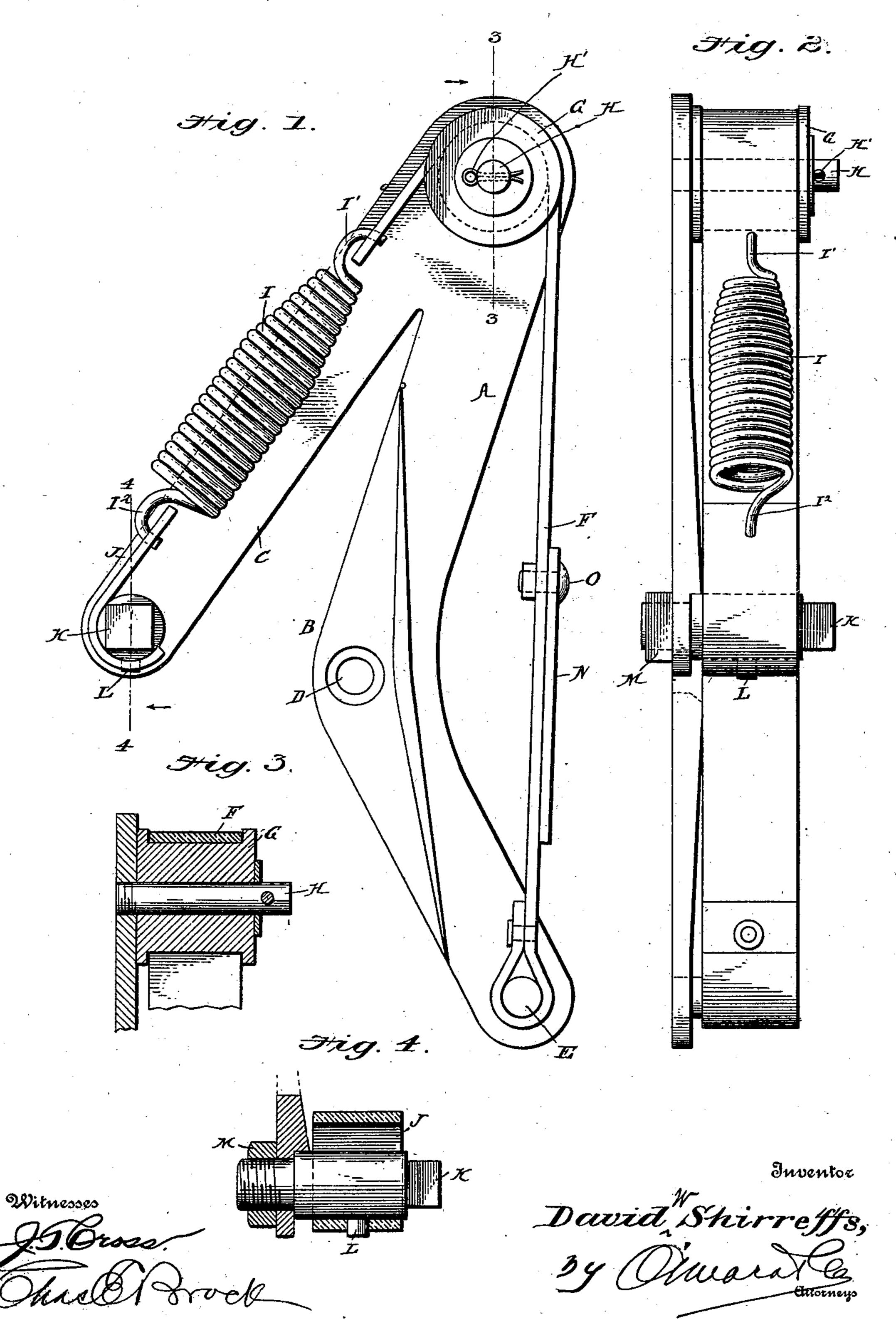
D. W. SHIRREFFS. PICKER CHECK FOR LOOMS.

(Application filed Apr. 2, 1898.)

(No Model.)



UNITED STATES PATENT OFFICE.

DAVID WOOD SHIRREFFS, OF OSWEGO FALLS, NEW YORK.

PICKER-CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 661,083, dated November 6, 1900.

Application filed April 2, 1898. Serial No. 676,200. (No model.)

To all whom it may concern:

Be it known that I, DAVID WOOD SHIR-REFFS, a citizen of the United States, residing at Oswego Falls, in the county of Oswego 5 and State of New York, have invented a new and useful Picker-Check, of which the fol-

lowing is a specification.

My invention relates to improved means for checking or stopping the shuttles used in 10 power-looms after the shuttle has been cast or thrown, in the process of weaving, into the shuttle-box, one object of my invention being to provide means to take the place of cloth packing or waste or other substances some-15 times used in this position, but which produce too sudden a shock in stopping the shuttle.

A further object of my invention is in thus obviating and preventing the sudden stoppage and checking of the shuttle to prevent 20 frequent breakages in the yarn or filling, especially in the case of soft yarn or filling and soft bobbins, to prevent the loosening or unwinding of the yarn or filling from the bobbin when the shuttle is stopped, and to per-25 mit of the loom being run at a higher speed to produce more cloth.

My invention further consists in the improved construction, arrangement, and combination of parts hereinafter fully described 30 and afterward specifically pointed out in the

appended claim.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now 35 proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view in side elevation of a 40 shuttle-check constructed in accordance with my invention. Fig. 2 is a view thereof in edge elevation. Fig. 3 is a detail sectional view on the line 3 3 of Fig. 1. Fig. 4 is a detail sectional view on the line 44 of Fig. 1.

Like letters of reference mark the same parts wherever they occur in the different

figures of the drawings.

Referring to the drawing by letters, A represents the main frame of the device, which 50 should be constructed sufficiently strong to support the other parts. It consists of a plate of metal bowed or formed with an angle at B

and provided with an arm Cat an inclination to the main body. At the angle B is formed an opening through which to pass the bolt for 55 securing the device to the shuttle-box.

E is a stud upon which is secured one end of a strap F, which passes from the stud over a spool G, mounted on a pin H and held by a split pin H', the pin H being threaded into the 60 main plate at the angle formed by its junction with its branch or arm C. The strap is continued a short distance after passing around the spool G and is provided with a perforation to receive the hook end I' of a 65 coiled spring I, which has its opposite end hook I² engaged in a perforation in the strap J, which passes partially around a stud K in the outer end of the arm C and is engaged over a radial pin L, projecting from the stud, 70 so that when the stud is turned the strap will be wound around it. When the stud is turned to adjust the strap in this respect, it is securely clamped in this position by a nut M. A reinforcing-strap N is secured to the strap 75 F by means of a bolt O and forms a buffer to receive the blow of the shuttle. By means of the spring I an elastic tension is given to the strap F, and by means of the connection of the strap J with the adjustable stud K the 80 tension of the spring and strap F is regulated at the will of the operator. The frame A, as before stated, is fastened to the shuttle-box by means of a bolt passing through the opening D in such a position that the impact or 85 blow in the end of the shuttle in the process of weaving is received on the strap F or the reinforcing buffer-strap N, causing the spiral spring to yield and the leather strap F at the same time to pass slightly over the spool G 90 and to swing back, stopping the shuttle gently without violent shock.

While I have illustrated and described what I now consider efficient means for carrying out my invention, I do not wish to be under- 95 stood as limiting myself to the exact details of construction shown and described, but hold that such slight changes or variations as might suggest themselves to the ordinary mechanic would properly fall within the limit 100 and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is-

In a picker-check, the combination with a bow-shaped base, the bend of which is perforated and one end of which is provided with an arm which extends at an inclination to the rear of the bow, the free end of the arm being perforated, a stud and a spindle at the respective ends of the base, a stud in the perforation at the end of the arm, the intermediate portion of which is provided with a radially-projecting stud the end through the perforation being screw-threaded and provided with a clamping-nut and the opposite end being angular whereby it may be ad-

justed and secured to the arm, a spool loosely journaled upon the spindle, a strap secured 5 to the stude at the end of the bow and the free end of the arm, respectively, one of which straps is longer than the other and is passed over the spool, and a coiled spring secured at its ends to the free ends of said straps, sub- 20 stantially as described.

DAVID WOOD SHIRREFFS.

Witnesses:

EDWARD A. HOGAN, MATILDA A. BAKER.