

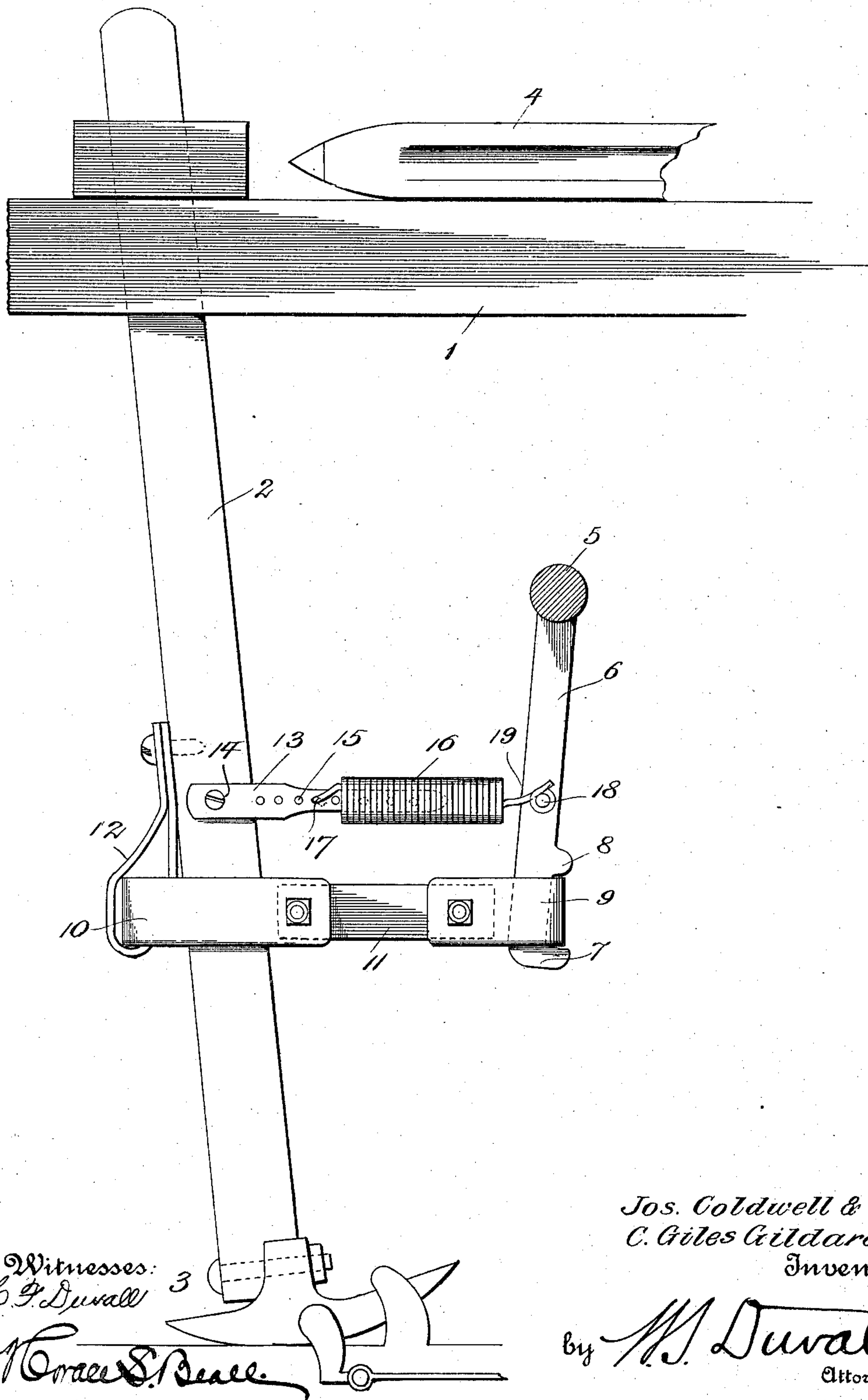
No. 736,582.

PATENTED AUG. 18, 1903.

J. COLDWELL & C. G. GILDARD.
COMBINED PICKER STAFF AND SHUTTLE CHECK.

APPLICATION FILED JUNE 25, 1902.

NO MODEL.



UNITED STATES PATENT OFFICE.

JOSEPH COLDWELL, OF FALL RIVER, AND CHRISTOPHER GILES GILDARD,
OF SWANSEA, MASSACHUSETTS.

COMBINED PICKER-STAFF AND SHUTTLE-CHECK.

SPECIFICATION forming part of Letters Patent No. 736,582, dated August 18, 1903.

Application filed June 25, 1902. Serial No. 113,138. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH COLDWELL, residing at Fall River, and CHRISTOPHER GILES GILDARD, residing at Swansea, in the county of Bristol and State of Massachusetts, citizens of the United States, have invented new and useful Improvements in a Combined Picker-Staff and Shuttle-Check, of which the following is a specification.

10 This invention relates to improvements in looms, and has particular reference to a new and improved combined picker-staff and shuttle-check.

15 The main objects of the invention are to so locate a yielding or spring check with relation to the picker-staff and the picking-shaft arm that the mutual movement of the two will require less motion upon the part of the spring of the check; to construct a yielding check 20 that will maintain the picking-ball closely against the cam, whereby the picking of the loom is rendered easier and sure in case of any sudden changes or variations in the speed of the loom, and finally to construct an adjustable check that is durable, cheap, and 25 simple.

Other objects of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

30 In the drawing, which shows so much of an ordinary loom as is necessary for the purpose of illustrating the applicability of our invention, 1 designates the lay-beam; 2, the picker-staff; 3, the shoe upon which it rocks, and 4 the shuttle.

35 5 designates the picking-shaft, from which depends the picking-shaft arm 6, the latter provided at and near its lower end with the lugs 7 and 8, respectively. Connected loosely to the picking-shaft arm between the lugs 7 and 40 8 thereof is the small lug-strap 9, a large lug-strap 10 being likewise loosely connected to the picker-staff. These two lugs are, as is usual, connected at their inner ends to each other by means of the center piece 11. The 45 lugs 7 and 8 serve to support and maintain in position the small lug-strap 9, while a loop 12, secured to and depending from the picker-staff, supports the large lug-strap 10.

50 The check for yieldingly supporting the picker-staff against the impact of the shuttle and employed to gradually overcome the flight

thereof comprises a section 13, preferably of leather, secured by a screw 14 or otherwise to the side of the picker-staff, and may have its 55 opposite end reduced and provided with a series of adjusting-holes 15 and a coiled spring 16 of sufficient diameter to receive the reduced end of the strap. The coiled spring has one of its terminals bent to form a hook 60 17, designed to engage with any one of the series of perforations in the section 13, whereby the connection is adjustable, and its opposite end bent about a pin 18, projecting from the face of the picking-shaft arm 6, as indicated 65 at 19, or otherwise connected thereto.

It will be obvious that when the shuttle in its flight abuts suddenly against the picker-staff the latter will yield to the force of the blow by reason of the spring-check described, 70 whereby the flight of the shuttle is gradually overcome and said shuttle brought to a stop without danger of rebounding from the shuttle-box, thereby avoiding any chance of the loom "banging off" or "knocking off" or 75 breaking the cop.

Having thus described our invention, what we claim is—

1. The combination, in a loom, comprising a picker-staff, a picking-shaft and a picking-shaft arm, of a connection between the picking-shaft arm and the picker-staff said connection comprising a non-yielding and a yielding section the former having adjusting-holes and the latter having a hook for remov- 80 ably engaging the same. 85

2. The combination, in a loom, comprising a picker-staff, a picking-shaft and a picking-shaft arm, of a check for the picker-staff the same comprising a flexible section 13, secured 90 to the staff and having its opposite end reduced and provided with perforations, and a coiled-spring section receiving said reduced end, said spring having one terminal secured to the picking-shaft arm and the other bent to 95 form a hook and engaging one of the perforations of the said section 13.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH COLDWELL.

CHRISTOPHER GILES GILDARD.

Witnesses:

WILLIAM H. BRIERLEY,

NICHOLAS HATHEWAY, Jr.