No. 857,424. PATENTED JUNE 18, 1907.

# N. VAILLANCOURT.

## PICKER STICK CHECK.

APPLICATION FILED OCT. 2, 1906.

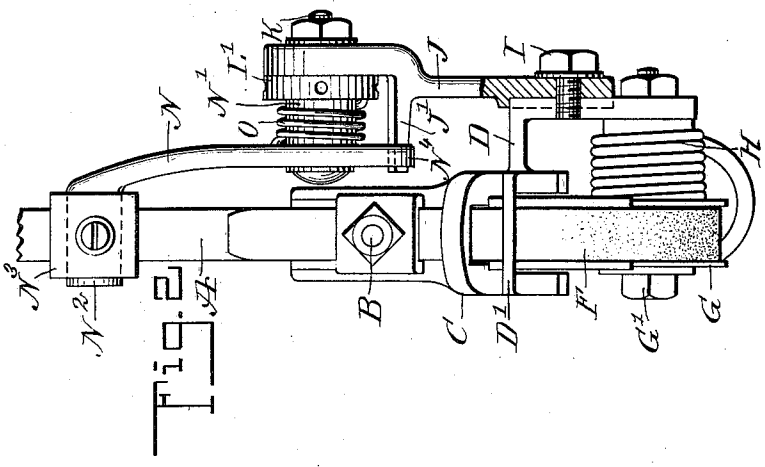

Fig. 2

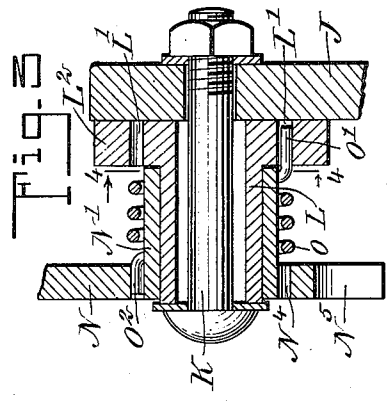

Fig. 3



Fig. 1



Fig. 4

WITNESSES

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## PICKER-STICK CHECK.

No. 857,424. Specification of Letters Patent. Patented June 18, 1907.

Application filed October 2, 1906. Serial No. 337,071.

*To all whom it may concern:*

Be it known that I, NAPOLÉON VAILLANCOURT, a citizen of the United States, and a resident of Lewiston, in the county of Androscoggin and State of Maine, have invented a new and Improved Picker-Stick Check, of which the following is a full, clear, and exact description.

The invention relates to looms, and its object is to provide a new and improved picker stick check, arranged to insure an easy impact of the shuttle on the picker stick, thus preventing breaking of the filling, and to reduce the liability of the breaking of the picker stick and picker straps to a minimum.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the improvement as applied; Fig. 2 is a side elevation of the same, part being in section; Fig. 3 is an enlarged sectional side elevation of the improvement on the line 3—3 of Fig. 1, and Fig. 4 is a sectional front elevation of the same on the line 4—4 of Fig. 3.

The picker stick A is secured near its lower end by a bolt B to a rocker C mounted to rock on a flat surface D′ of the support D held on the loom frame E. The lower end of the picker stick A is connected by the strap F with a pulley G mounted to turn on a stud G′ carried by the support E, and the said pulley G is connected to a spring H which effects a return movement of the picker stick A, it being understood that the latter is connected in the usual manner with the mechanism for imparting a swinging motion to the picker stick with a view to propel the shuttle from one side of the loom to the other. The parts so far described are the ones of a well known picker stick motion, so that further description of the same is not deemed necessary.

On the support D is secured an upwardly extending bracket J carrying a bolt K for securely holding a bearing sleeve L in position on the upper end of the bracket J. On this bearing sleeve L is mounted to rock the hub N′ of an arm N provided at its free end with an angular extension $N^2$ supporting a cushion $N^3$ of leather or other material, and extending into the path of the picker stick A, so that when the latter is on its return movement caused by the action of the strap F, and the spring-actuated pulley G connected therewith, then the cushion $N^3$ forms a check for the picker stick A. A spring O is coiled on the hub N′ of the arm N, and one end O′ of this spring engages one of a series of apertures L′ formed in a flange $L^2$ of the bearing L, and the other end $O^2$ of the said spring O engages an aperture $N^4$ in the arm N, so that the arm N is pressed inwardly against the picker stick by the spring O and consequently is free to yield on the return movement of the picker stick A. The arm N normally holds the picker stick A in a yielding position as indicated in Fig. 1, so that when the shuttle on its return movement into the shuttle box strikes the upper end of the picker stick A then the latter is free to yield owing to the action of the spring pressed arm N, whereby an easy impact of the shuttle on the picker stick is had and consequently breaking of the filling and injury to the picker stick and the parts connected therewith is entirely prevented.

On loosening the bolt K the bearing L can be conveniently turned so as to regulate the tension of the spring O and consequently to regulate the resistance of the swing arm N relative to the picker stick A. The lower end of the swing arm N is preferably in the form of a fork $N^5$, between the members of which extends a lug J′ integral on the bracket J, to limit the swinging motion of the swing arm N. The bolt K is preferably held laterally adjustable on the upper end of the bracket J, so as to bring the improvement into the proper relation relative to the picker stick A.

The device is very simple and durable in construction and can be readily applied to the picker stick motion, it being understood that I do not limit myself to the application of the improvement on the particular picker stick motion shown in the drawings and described above.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

The combination with the picker stick, of a bracket having an opening therethrough, a bearing, a bolt traversing the bearing and

the opening, said bearing having an annular flange, a check arm for engagement by the picker stick, and having a hub journaled on the bearing, a coil spring on the hub, said spring having one end connected with the arm and the other with the flange of the bearing, the lower end of said arm being forked and the bracket being provided with a lug engaging the fork whereby to limit the swinging of the arm, and a nut engaging the bolt whereby to adjust the bearing with respect to the arm.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NAPOLÉON VAILLANCOURT.

Witnesses:
HENRI P. BECHARD,
E. E. BECHARD.