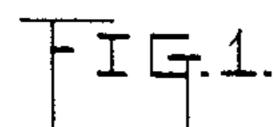
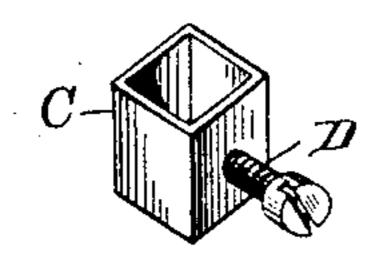
(No Model.)

C. C. WICKMAN. PIANO DAMPER.

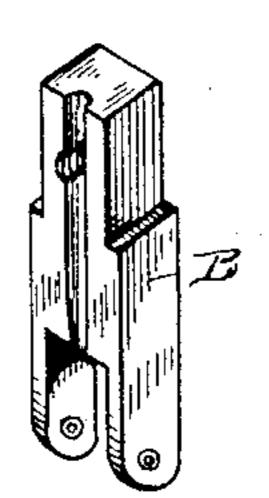
No. 424,841.

Patented Apr. 1, 1890.

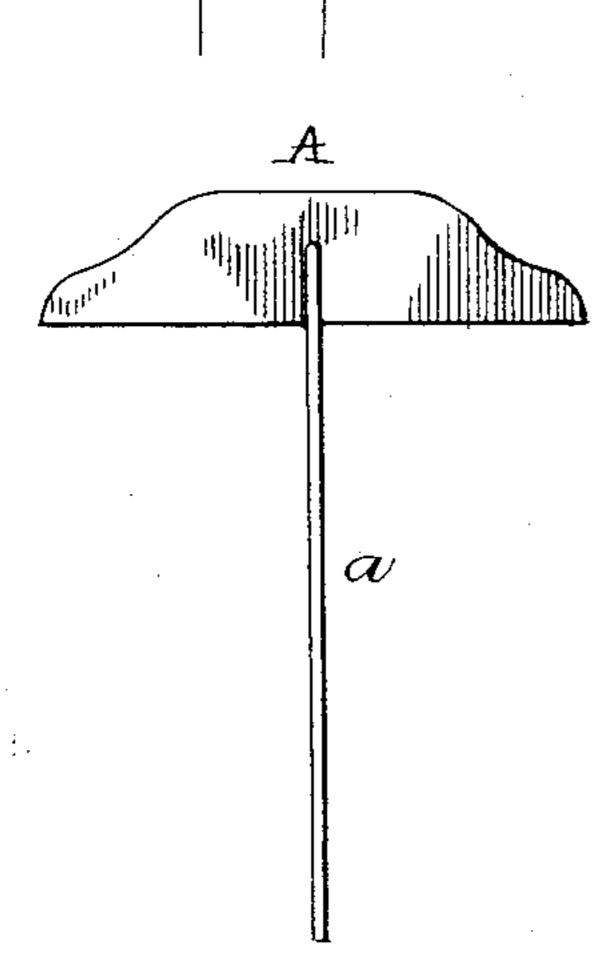


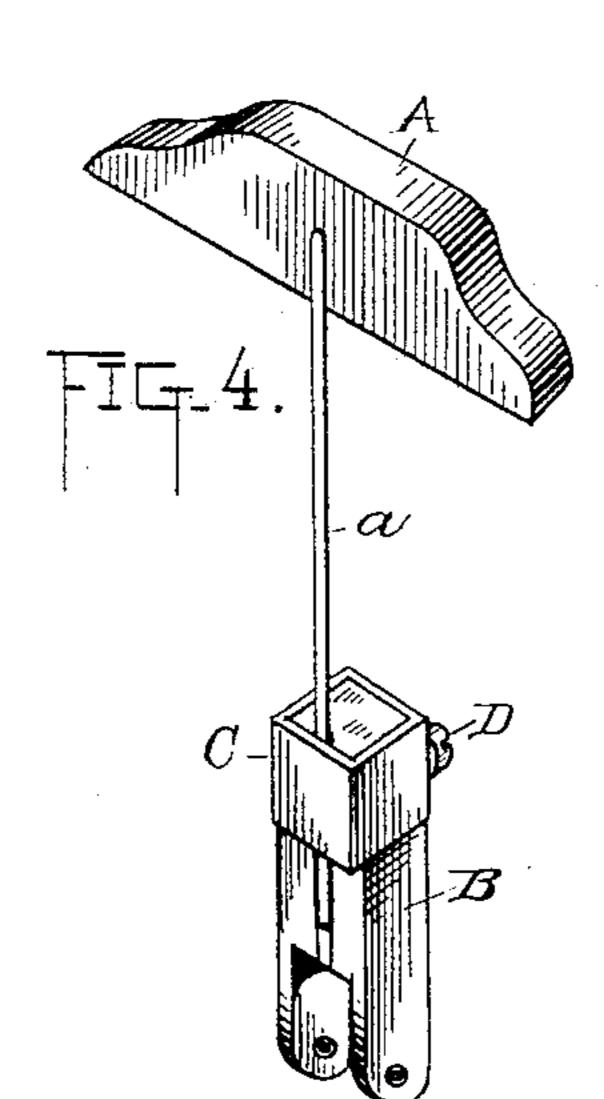












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Charles C. Mich

ATTORNEY

United States Patent Office.

CHARLES C. WICKMAN, OF NEW YORK, N. Y.

PIANO-DAMPER.

SPECIFICATION forming part of Letters Patent No. 424,841, dated April 1, 1890.

Application filed October 30, 1889. Serial No. 328,634. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. WICKMAN, of the city, county, and State of New York, have invented a new and useful Improve-5 ment in Pianos, of which the following is a specification.

My invention relates to a means for securing the damper head and wire connected therewith of a piano to the capsule forming 10 part of the motion-work—that is, the damperlever, the keys, and parts intervening.

In the accompanying drawings, forming a part hereof, Figure 1 is a perspective view of my device. Fig. 2 is a perspective view of is the capsule. Fig. 3 is a view in elevation of the damper-head and damper-wire, and Fig. 4 is a perspective view of my device connecting the damper head and wire to the capsule.

I have shown in the drawings, Fig. 1, my device as being a hollow square; but, as will be readily understood, it can be made circular or triangular or any other form suitable to the circumstances of each case.

A is the damper-head of wood, and a the damper-wire connected therewith. B is the capsule, also of wood, and C is my device, which is made of metal or other suitable material.

Heretofore, in order to secure the damper head and wire to the wooden capsule, the wire is inserted in a hole which has been first drilled down into the upper end of the capsule, and a screw is then screwed into 35 one side until it strikes the damper-wire, and is then further screwed tightly against this damper-wire in order to prevent it, if possible, from turning; but it has been found that after a short time the damper-wire will 40 turn, since the opening in the wooden capsule enlarges, notwithstanding that the screw presses it tightly against the wood; and as the capsule is made of a piece of wood of very small cross-sectional area, not more 45 than one-quarter of an inch square, and besides is very dry, the screw passing into it will always split it. To overcome these objections I have invented a device which is lettered in the drawings C, Figs. 1 and 4. 50 The capsule B is first grooved down one side, into which the damper-wire a is afterward inserted or placed. Before, however, the damper-wire is inserted into this groove the I

surrounding square or ring of metal C is placed over the capsule, which has been re- 55 duced in size so that the square or ring C will fit tightly over it, and then the damperwire a is inserted into the opening made by the groove in the capsule and the surrounding square or ring. A screw D passes through 60 the opposite side of the surrounding square, or ring into and through the capsule C until it strikes the damper-wire, and is then further screwed tightly against this damperwire, which thereby is pressed against the 65 surrounding metal square or ring, keeping it firmly in place and preventing it from turning. Thus it will be seen that not only is the damper-wire by my device firmly secured in place in the capsule, and cannot 70 move afterward, except by unscrewing the screw D, but also the capsule is prevented from splitting when the screw D is inserted.

What I claim as my invention is— 1. In a piano, the combination, with the 75 capsule and the damper-head and damperwire which are to be connected with said capsule, of a hollow piece of metal or other suitable material which surrounds the said capsule and the damper-wire, which is inter-80 posed between the capsule and the surrounding piece, and a screw which passes into and through said surrounding piece into the capsule and pressing the damper-wire tightly against said surrounding piece, substantially 85 as and for the purpose hereinbefore described.

2. In a piano, the combination, with the capsule having a groove along one side, and the damper-head and damper-wire which are to be connected with said capsule, of a 90 hollow piece of metal or other suitable material which surrounds said capsule and the damper-wire, which is interposed between the capsule and the surrounding piece within the groove in said capsule, and a screw 95 which passes into and through said surrounding piece into the capsule and pressing the damper-wire tightly against said surrounding piece, substantially as and for the purpose hereinbefore described.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses. CHARLES C. WICKMAN.

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Witnesses:

G. A. WICKMAN, GEO. H. SONNEBORN.