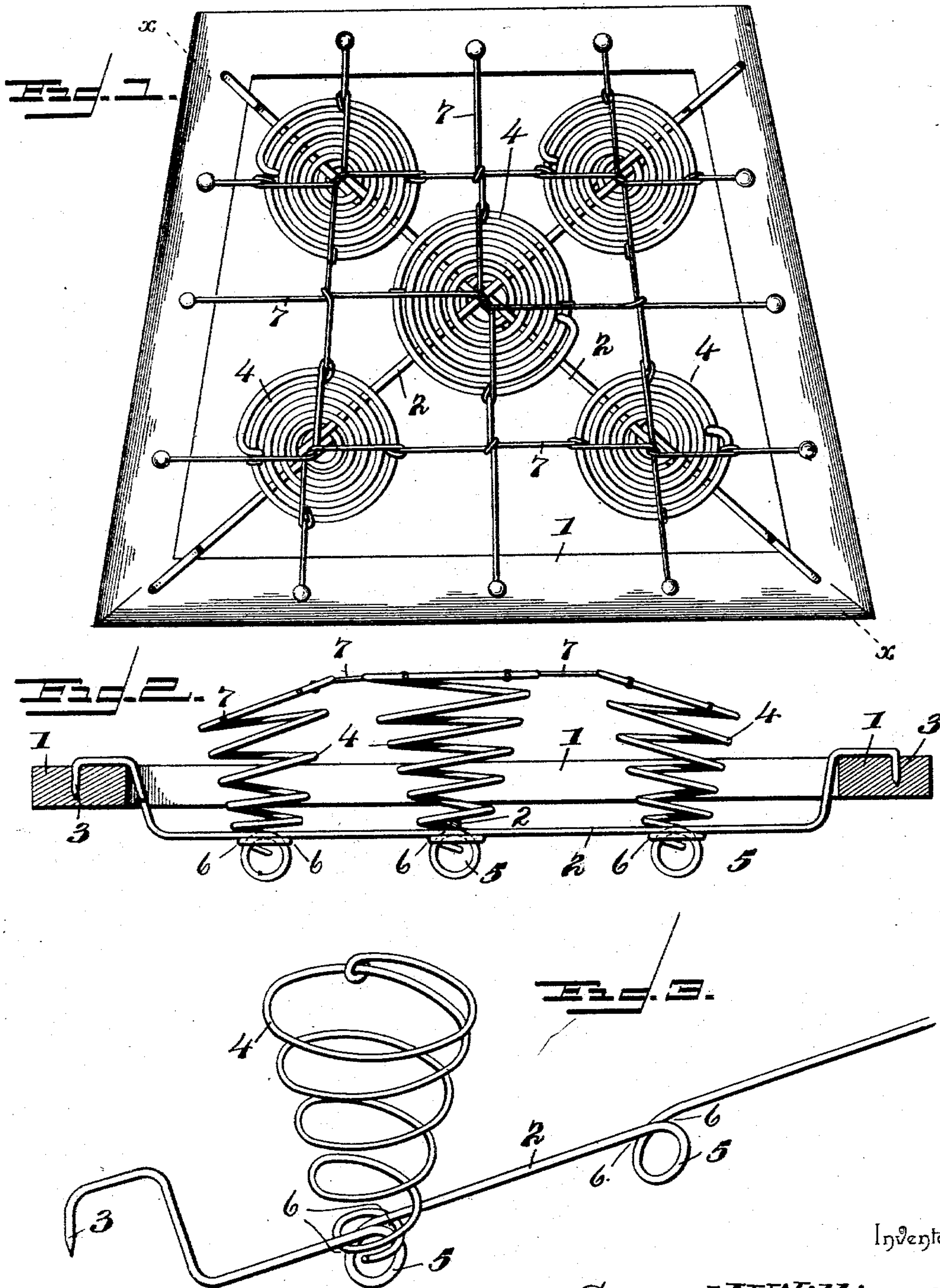


(No Model.)

S. U. WILLIAMSON.
SPRING SUPPORT FOR FURNITURE.

No. 533,693.

Patented Feb. 5, 1895.



Inventor

Samuel U. Williamson

Witnesses

E. H. Stewart
L. R. Thompson

By *his* Attorneys.

C. A. Snow & Co

UNITED STATES PATENT OFFICE.

SAMUEL U. WILLIAMSON, OF NEWBURG, NEW YORK.

SPRING-SUPPORT FOR FURNITURE.

SPECIFICATION forming part of Letters Patent No. 533,693, dated February 5, 1895.

Application filed May 18, 1894. Serial No. 511,710. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL U. WILLIAMSON, a citizen of the United States, residing at Newburg, in the county of Orange and State of New York, have invented a new and useful Spring-Support for Furniture, of which the following is a specification.

This invention relates to spring supports for furniture; and it has for its object to effect certain improvements in devices of that character that are designed to support a set of springs in a chair seat, settee, couch, or any other piece of furniture that is to be upholstered.

To this end the main and primary object of the present invention is to provide a support for the ordinary spiral or convolute springs employed in upholstery, whereby such springs can be readily set up in position and securely fastened or locked against displacement.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings:—Figure 1 is a top plan view of a chair seat frame equipped with the herein-described improvement. Fig. 2 is a sectional view on the line $x-x$ of Fig. 1. Fig. 3 is a detail in perspective of one of the supporting wires showing one of the spiral or convolute springs connected therewith.

Referring to the accompanying drawings, 1 designates a substantially rectangular chair seat frame of the ordinary construction, and in the present invention the said chair seat frame forms a support for the diagonally crossed spring supporting wires 2. The spring supporting wires 2, are formed out of suitable lengths of stout wire and cross or intersect each other at the center of the frame 1, said wires being provided at their opposite ends with the engaging hooks 3, bent upwardly from the longitudinal line of the wires and adapted to be driven into the top corners of the frame 1, in order to provide means for securely positioning said wires, and by reason of the upward bend or disposition of the said engaging hooks, the wires 2, are disposed be-

low the plane of the chair seat frame 1, in order to provide for supporting the spiral or convolute springs 4, at the proper elevation above the top of the frame, said springs 4, being of the ordinary construction.

The diagonally crossed spring supporting wires 2, are, at different points along their lengths according to the number of springs to be supported, provided with the pendent spring supporting coil loops 5, that are formed by coiling the supporting wires, and which are disposed below the longitudinal line of said wires, said coil loops producing at the points where they merge into the supporting wires the engaging necks 6, that are adapted to be engaged by the lower small coils of the springs 4. The lower coils of the springs 4, are of a diameter less than the width of the coil loops 5, and in mounting the said springs in position the said lower coils thereof are turned into engagement with the necks 6, at the top of the coil loops 5, and by continued turning of the springs the same will be securely locked in position so as to be properly supported, and it will be noted that by reason of the connection described, the springs will have a double bearing, that is an equal bearing on the opposite top sides of the coil loops 5, and also directly on top of the wires 2, above the pendent coil loops whereby the same will be firmly supported in position and positively prevented from being displaced.

At the point of intersection, the uppermost spring supporting wire 2, is not provided with a coil loop, while at this point the lowermost of said wires is provided with such loop, and by engaging the lower coil of the central spring of the set with the neck of the central coil loop of the lowermost spring supporting wire, the said spring will not only be properly supported in position but will serve to lock the crossing wires together.

The spring bottom just described, is completed by connecting the upper ends of the springs together and to the seat frame by a net work of cords 7, in the usual manner.

While the herein-described spring support has been described, as used in connection with a chair seat frame, it will be understood that the same can also be used in connection with settees, couches or other pieces of furniture to be upholstered, and it will be under-

stood that changes in the form, proportion and the minor details of construction, may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

The combination of a pair of diagonally crossed spring supporting wires, the lower of which is provided at the point of intersection and below the plane thereof with a pendent spring-supporting coil loop producing at the merging point with the wire a contracted engaging neck 6, and a spiral or convolute spring, the lower coil of which is of a less di-

ameter than the width of said coil loop and is adapted to be turned into engagement with said engaging neck 6, at the top of said pendent coil loop, said spring locking the intersecting wires together and having an equal bearing on the opposite top sides of the coil loop and also on top of the upper of said intersecting supporting wires, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SAMUEL U. WILLIAMSON.

Witnesses:

JAMES HASLETT,

SAMUEL U. WILLIAMSON, Sr.