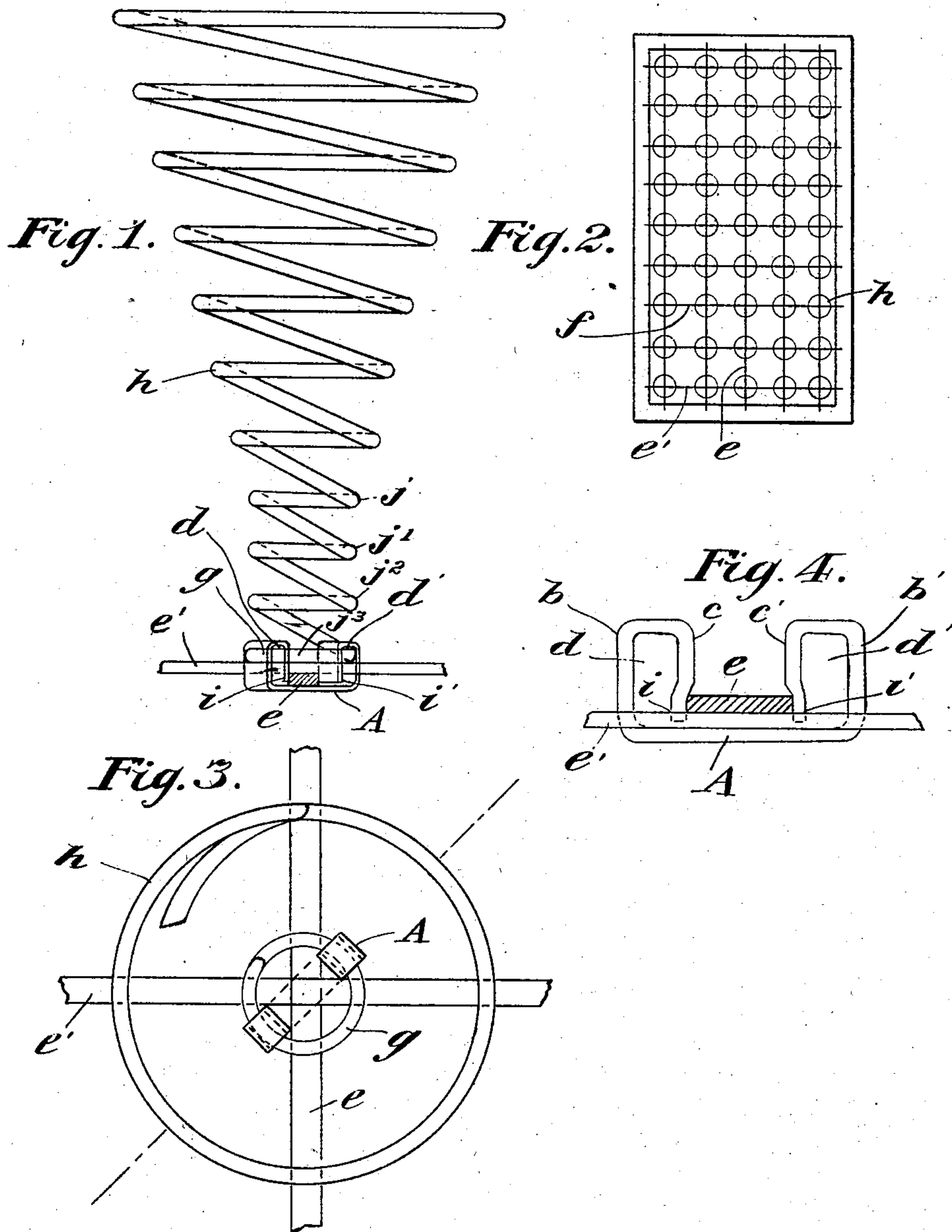


No. 720,108.

PATENTED FEB. 10, 1903.

W. BURSCH.  
SPRING FOR FURNITURE, &c.  
APPLICATION FILED MAY 5, 1902.

NO MODEL.



Witnesses:  
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C. A. Jarvis.

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By his Attorney,  
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# UNITED STATES PATENT OFFICE.

WILHELM BURSCH, OF BERLIN, GERMANY.

## SPRING FOR FURNITURE, &c.

SPECIFICATION forming part of Letters Patent No. 720,108, dated February 10, 1903.

Application filed May 5, 1902. Serial No. 105,901. (No model.)

*To all whom it may concern:*

Be it known that I, WILHELM BURSCH, a subject of the German Emperor, residing at Berlin, in the German Empire, have invented certain new and useful Improvements in or Relating to Springs for Furniture and for other Purposes, (for which I have made application for Letters Patent in Great Britain, under No. 4,167, dated 18th day of February, 1902,) of which the following is a specification.

This invention relates to means for attaching springs to a framework; and its object is to prevent springs from slipping out of place.

One feature of this invention is to provide a clamp for holding springs to the framework, so as to render the use of screws, rivets, or bolts unnecessary, and which will permanently maintain the spring in position.

It is well known, in the case of bed-springs especially, which receive the most strain, that some become weakened or disabled, while others maintain their strength and shape. The present device is calculated to permit the removal of such disabled springs without injury to the framework or spring.

Referring to the drawings, Figure 1 is an elevation of the spring as clamped to the straps of the framework. Fig. 2 is a view of a bed-spring. Fig. 3 is a view showing the position of the clamp, and Fig. 4 is an enlarged view of the clamp structure.

In the several views like parts are designated by similar characters of reference.

The clamping device comprises a yoke A, which is bent upon itself at  $b\ b'$  and  $c\ c'$ , respectively, to form loops or eyes  $d\ d'$ . These clamps are placed below the straps or supports  $e$  and  $e'$  of the framework  $f$ , so that the eyes  $d\ d'$  will project above said straps, and through these eyes is inserted the first convolution  $g$  of the spring  $h$ . The tendency of the supports or straps  $e$  and  $e'$  to part or separate will have a tendency to pull the yoke A down, more securely holding the spring to the strap on which it rests. The lower free ends  $i\ i'$  when the clamp is in position extend downward beyond the strap  $e$  and prevent the clamp from being laterally displaced and at the same time keep it centrally disposed with relation to said crossing-points, so that the spring  $h$  is centrally situated on the crossing-

point of said straps. The free ends  $i\ i'$  are also bent laterally to an extent sufficient to permit the tongues to pass the strap  $e'$ .

The spring  $h$  in the present instance is in the form of the usual spiral, but is provided at its bottom with four convolutions  $j\ j'\ j''\ j'''$ , respectively, of equal diameter, so that in turning the spring will not force apart the eyes  $d\ d'$ . Furthermore, by providing a spring with a series of convolutions of equal diameter when the spring is subjected to compression the slight lateral sway or bending motion is avoided.

It will be seen that the use of bolts or screws is rendered unnecessary in the use of this clamp and that the spring may be readily attached or detached without destroying the framework. It will also be observed that this clamp will keep the spring firmly to the straps and centrally located with relation to the crossing-points thereof, thereby making the loaded point coincident with said crossing-point.

Variations of structure and use may be employed without departing from this invention.

Having described my invention, I claim—

1. The combination of a frame having a plurality of supports crossing each other and carried by said frame, springs mounted on said cross-supports, and a clamping device fitted to the under side of said supports and comprising a member bent upon itself to form upwardly-projecting eyes, said eyes being provided with a spring portion which bears firmly against one of said cross-supports.

2. The combination of a framework, of springs, and a clamp for holding said springs on said framework and which comprises a yoke having two eyes which project from the under side of said framework, and which receives said springs, and spring-tongues formed by said eyes and which bear against the supports of the framework.

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

WILHELM BURSCH.

Witnesses:

WOLDEMAR HAUPT,  
HENRY HASPER.