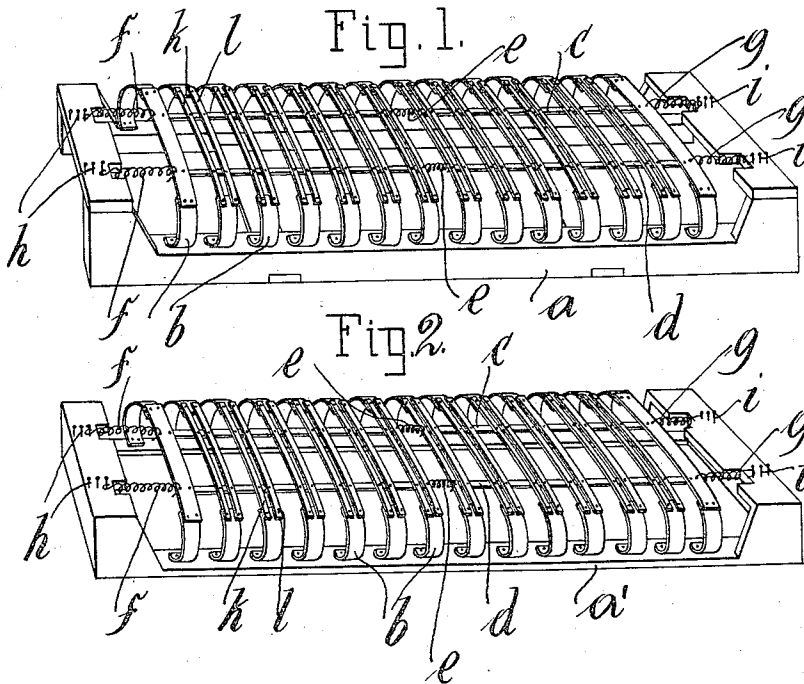


F. ZINGG.
 SPRING UPHOLSTERY.
 APPLICATION FILED AUG. 14, 1911.

1,052,706.

Patented Feb. 11, 1913.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRITZ ZINGG, OF ZÜRICH, SWITZERLAND.

SPRING UPHOLSTERY.

1,052,706.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Application filed August 14, 1911. Serial No. 643,870.

To all whom it may concern:

Be it known that I, FRITZ ZINGG, a citizen of the Swiss Republic, residing at Zurich, in Switzerland, have invented a certain new and useful Improvement in Spring Upholstery, of which the following is a specification.

The object of this invention is to provide an arrangement of upholstery springs of very simple construction which will afford a highly resilient bearing or resting surface capable of supporting considerable pressure.

The invention is illustrated in the accompanying drawing, in which:—

Figure 1 is a perspective elevation of a mattress constructed according to the invention; Fig. 2 is a similar view of a mattress with a somewhat different construction of the frame.

Referring to Fig. 1, *a* represents the mattress frame, across which are placed arched, composite springs having their ends inwardly bent where they rest on the side bars of the frame *a*. Each of these springs, except the two at the extreme ends, consists of four parts, namely the two broad, curved parts *b* resting on the frame *a*, and two narrower but specifically stronger parallel parts *k, l* connecting the upper ends of the parts *b*. By this means a very resilient bed surface is obtained. Rods *c, d*, arranged longitudinally, *i. e.*, transversely to the arched composite springs, connect the latter to each other, but each of said rods is in two parts which are connected by a coiled spring *e* at the middle of the mattress. The arched springs at the head and foot of the mattress are elastically connected to the head and foot bars of the frame by means of springs *f* and *g*, the connection being made by means of pins *h, i* arranged in series enabling the spring tension to be regulated.

In the construction shown in Fig. 2, an arrangement of springs is used similar to that shown in Fig. 1, and the same reference letters are applied to the several parts. The frame *a* is lighter than the frame *a* shown in Fig. 1, the longitudinal bars being flat, without cross bars except at the head and foot.

The improved arrangement of springs, as described, lends itself with great advantage to the construction of furniture with removable spring frames, enabling the springs to be removed for repair or renewal without necessitating the removal of the covers and stuffing, and the facility of cleaning is also an important hygienic advantage. The smooth curved springs, affording a rounded, even surface free from corners and projections, may for many purposes be used with a simple covering of textile or cane fabric.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

An article of the class described comprising a frame of side and end bars; arched springs extending across said frame, the central springs each having curved end parts attached to the said side bars, and narrow resilient strips connecting the end parts; lateral connections between the springs, the said connections having springs at their central part; and supplementary springs connecting the end springs to the said end bars of the frame, substantially as described.

In witness whereof I have signed this specification in the presence of two witnesses.

FRITZ ZINGG.

Witnesses:

CARL GÜBLER,
AUGUST RUEGG.