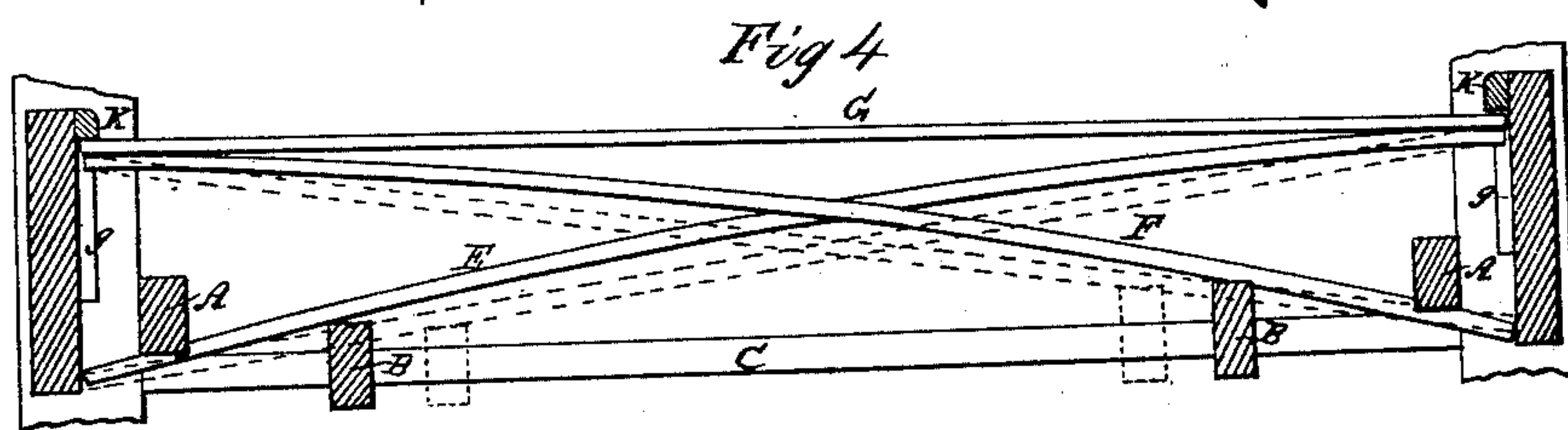
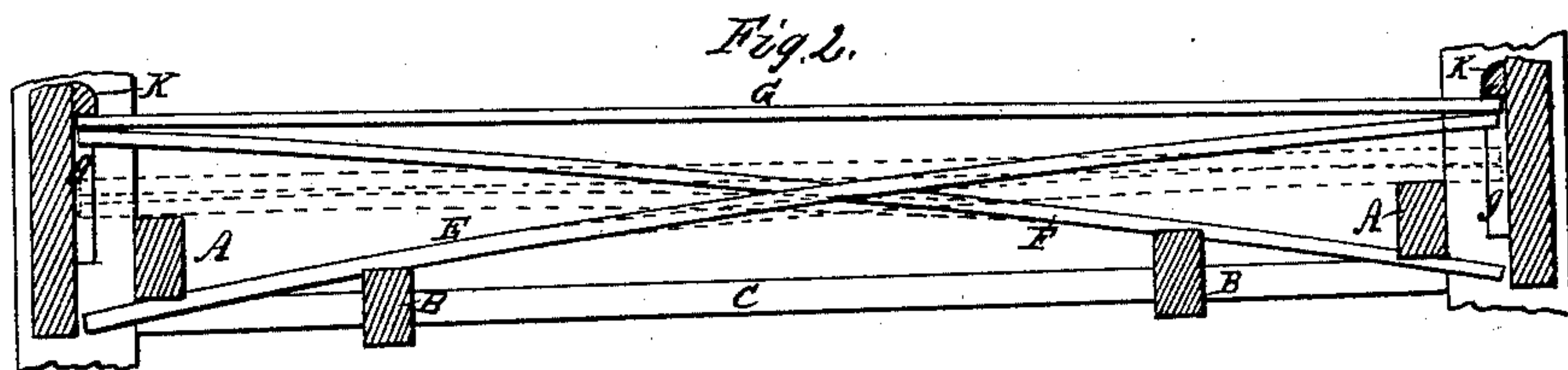
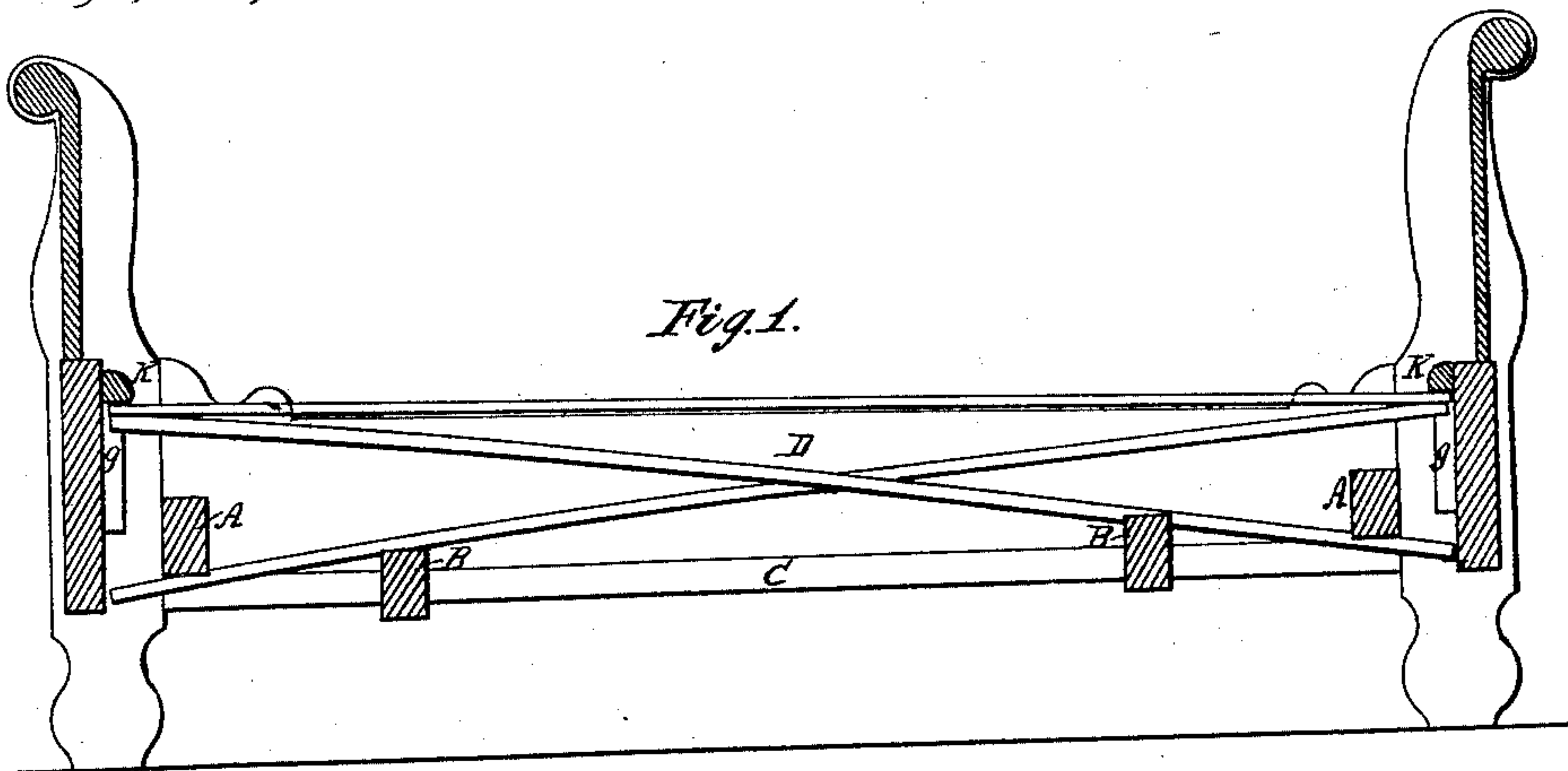


C. F. Spencer,

Bed Bottom,

No. 23,404,

Patented Mar. 29, 1859.



Witnesses
J. Praser.
S. J. Ellis

Inventor
Charles F. Spencer

UNITED STATES PATENT OFFICE.

CHARLES F. SPENCER, OF ROCHESTER, NEW YORK.

SPRING-BEDSTEAD.

Specification of Letters Patent No. 23,404, dated March 29, 1859.

To all whom it may concern:

Be it known that I, CHARLES F. SPENCER, of Rochester, in the county of Monroe and State of New York, have invented a new and Improved Method of Constructing Spring-Bedsteads; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 is a longitudinal section thereof. Fig. 2 is a section of the springs detached. Fig. 3 is an inverted view of a portion of the spring bottom. Fig. 4 is a section showing a change in the position of the fulcrum or lower bearings of the springs.

Similar letters refer to corresponding parts in all the figures.

Across the bottom of the bedstead frame I place four transverse bars, A A, and B B, which rest on the strip C, which is attached to the sideboard D. A series of slats E, F of two and a half or three inches in width and $\frac{5}{8}$ ths to $\frac{3}{4}$ ths of an inch, or thereabout, in thickness, and of a length corresponding to the side rail of the bedstead are provided of a number sufficient to fill the space within the bedstead frame when laid side by side. These are arranged by placing one end of each between the bars A, B, as shown, the end being below A and resting on the top of B, at a little distance back, the opposite end being free to move up and down as its flexibility will allow. These are disposed with the free and confined ends alternately at the head and foot, as seen in Fig. 3, so that the free end of one half is elevated at the head and the other half at the foot. Blocks, g, are glued to the head and foot boards to prevent them from being displaced laterally, but which do not interfere with their vertical motion. Another series of horizontal slats, G, is placed longitudinally on the top of them, one end resting on the free end of E, and the other on that of F, forming a level top or surface for the reception of the mattress.

It will be seen that all the unconfined part of the slats from the fulcrum B, being made thin for the purpose, forms a spring, and the entire length of the upper series, G, acting as such also, the combined effect of the latter in conjunction with a pair of the former is to produce a very elastic bottom for the bed. Each of the upper slats oper-

ates independently of the next, and either end independently of the other. The fulcrum bars, B, are movable by withdrawing a pin at each end which secures them in the holes, h h, as shown in Fig. 3, and, by placing them nearer to or farther from the bars A, a greater or less degree of flexibility is obtained.

If the slats lose their flexibility or become bent from use, they are readily drawn out and replaced in an inverted position, by which their lost qualities are at once restored. Their thickness should be varied to suit the firmness of the wood employed. Metal springs may be used in their place though I prefer wood from its lightness and greater cheapness.

A strip K, placed above the slats at each end serves to keep them of equal height when not in use. It is readily removed by withdrawing pins which secure it.

These springs accommodate themselves to the weight of the occupant, and to his person to as great an extent as is compatible with comfort.

The head of the bed may be made to have less spring than the foot if desired by adjusting the fulcrum bars accordingly.

As no nails, screws or other fastenings are employed it can not well get out of order, and from its great simplicity can be kept clean and free from vermin with the greatest ease; while its remarkable cheapness recommends it to the larger class of community.

I am aware that wooden slats with metallic springs have been used and that a patent was granted November 16, 1858, in which the slats are permanently attached at one end with wooden springs attached at the middle of each resting against a transverse bar; but differing in arrangement and effect from mine; therefore I do not claim broadly the use of spring slats; but

I claim—

The combination and arrangement of the spring slats E, F, with the bars A A, and fulcrum B, B, the latter arranged to increase or diminish the effect, and horizontal slats G resting at once on the free ends of each reverse series, substantially in the manner and for the purpose herein described.

CHARLES F. SPENCER.

Witnesses:

J. FRASER,
S. J. ALLIS.