

No. 612,675.

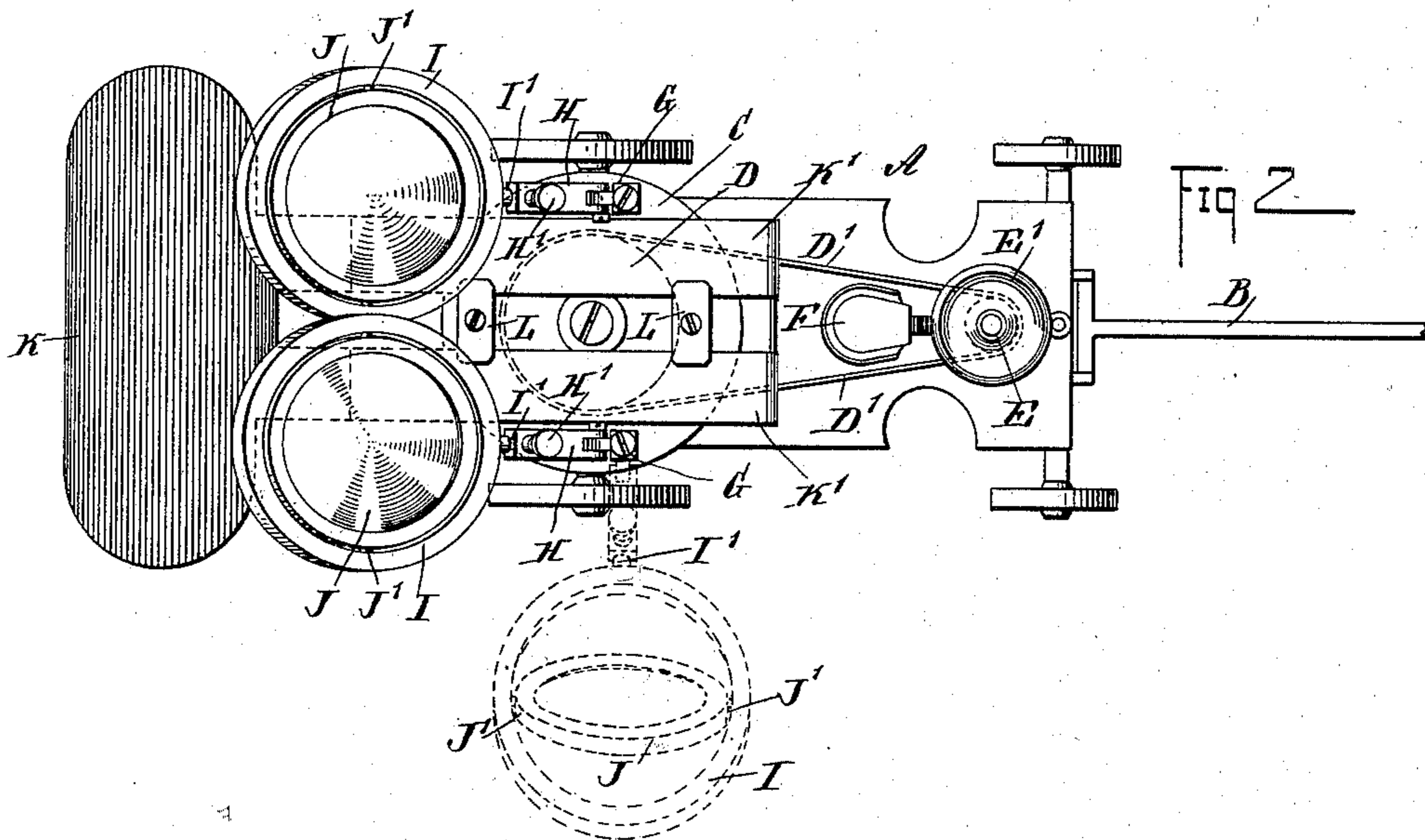
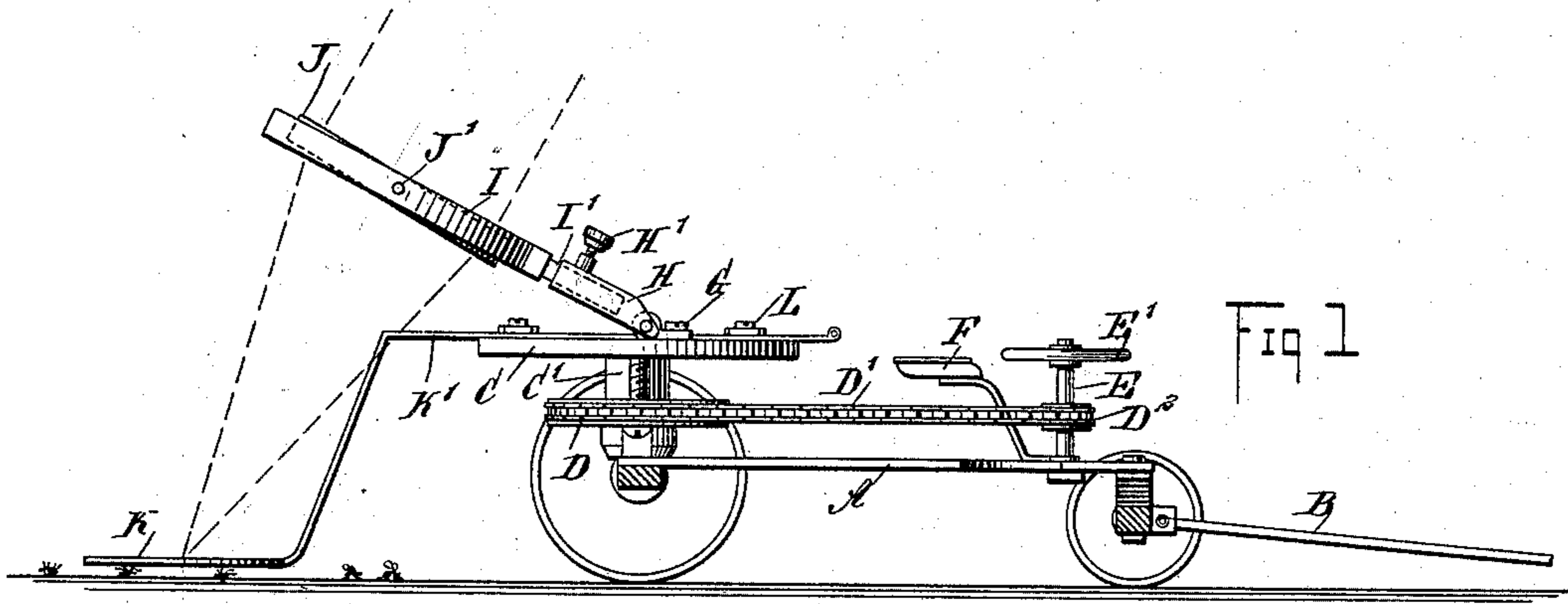
Patented Oct. 18, 1898.

V. RIEKE.

STUMP BURNER AND INSECT EXTERMINATOR.

(Application filed May 27, 1898.)

(No Model.)



WITNESSES:

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VICTOR RIEKE, OF FRANKLIN, MINNESOTA.

STUMP-BURNER AND INSECT-EXTERMINATOR.

SPECIFICATION forming part of Letters Patent No. 612,675, dated October 18, 1898.

Application filed May 27, 1898. Serial No. 681,868. (No model.)

To all whom it may concern:

Be it known that I, VICTOR RIEKE, of Franklin, in the county of Renville and State of Minnesota, have invented a new and Improved

5 Stump-Burner and Insect-Exterminator, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved combination stump-burner and insect-exterminator which is simple and durable in construction, very effective in operation, and arranged to readily set stumps or the like on fire or to highly heat a metallic plate for destroying grasshoppers, plant-lice,

15 and other insects, or for cracking rocks and for other purposes.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

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Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

25 Figure 1 is a sectional side elevation of the improvement, and Fig. 2 is a plan view of the same.

The improved stump-burner and insect-exterminator is preferably mounted on a wheeled vehicle A, of any approved construction and provided with a tongue B, to which the animals are hitched for drawing the vehicle over the ground. On the rear part of the vehicle A, preferably over the rear axle,

35 is mounted to turn a table C, provided on its shank C' with a sprocket-wheel D, connected by a sprocket-chain D' with a sprocket-wheel D², secured on a shaft E, mounted to turn in the forward portion of the vehicle A, as illustrated in the drawings. On the upper end of the shaft E is secured a hand-wheel E', adapted to be taken hold of and turned by the operator seated on the seat F. Now it is evident that when the hand-wheel E' is

40 turned a rotary motion is transmitted by the sprocket-wheels D² and D and the sprocket-chain D' to the table C, so as to turn the same in its bearing.

On the top of the table C are pivoted arms

50 G, on which are pivoted the sockets H, each adapted to receive the shank I' of a frame I, containing a concentrating-lens J, hung on

trunnions J' in the frame I. The shank I' is adapted to be secured in place in the socket H by a suitable set-screw H'.

By the arrangement described the lens J can be brought into any desired position relative to the position of the sun and the object, so that the rays of the sun are concentrated by the lens to a focus immediately on the object, so as to highly heat the same or set it on fire. It is understood that the bearings G can be swung around on their vertical pivot, while the sockets H can be swung up and down on their horizontal pivot to bring the lens J between the sun and the object and also to bring the frame I at the proper angle for concentrating the rays, the lens being swung on its trunnions for minute adjustment.

In case it is desired to burn a stump, for instance, the vehicle A is brought close to the stump, and then the table C is turned and the bearing G and socket H are adjusted, as previously described, to concentrate the rays of the sun to a focus on the stump, so that the stump will soon be ignited and caused to burn. If it is desired to crack a stone or a log, the same operation takes place, the focus being on the stone, so that the latter is heated and finally cracked by the heat.

If it is desired to destroy insects, I prefer to use a heat-plate K, on which the rays are focused, so that this plate is highly heated and in this condition passed over the grass or other plane forming the habitation for the insects. It is evident that the heat radiating from the plate readily destroys animal life.

The heat-plate K is provided with arms K', fitted to slide in bearings L on the top of the table C, which latter is rotated by the operator manipulating the hand-wheel E' after the plate K is heated, so that the latter is oscillated over the ground from one side to the other, while the vehicle is drawn forward over the ground.

The device is very simple and durable in construction, is not liable to get out of order, and the several parts can be readily adjusted to render the device serviceable for the purposes named.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the table, the heat-concentrating device adjustable thereon, and the heat-plate arranged to have the heat-rays from the concentrating device focused upon it, said heat-plate being mounted to slide toward and from the center of the table.

2. The combination of the body, the table rotatable thereon, the adjustable heat-concentrating device on the table, and the heat-plate slidable toward and from the center of the table and carried thereby so as to turn therewith.

3. A device of the class described, comprising a wheeled vehicle, a table on the vehicle, one or more concentrating-lenses adjustably mounted on the table, a heat-plate carried by the vehicle and on which the rays of the sun are concentrated to the focus of the said lenses, and means for turning said table and said heat-plate, as set forth.

4. The combination of the body, the table rotatable thereon horizontally, the bearing

mounted to swing on the table horizontally, the socket pivoted to the bearing to swing in a vertical plane, the frame carried in the socket, and the heat-concentrating device pivoted to the frame to swing about a horizontal axis arranged crosswise of the axis about which the socket swings.

5. The combination of the body, the table rotatable thereon horizontally, the bearing mounted to swing on the table horizontally, the socket pivoted to the bearing to swing in a vertical plane, the frame slidable inward and outward in the socket for adjustment, and the heat-concentrating device pivoted to the frame to swing about a horizontal axis arranged crosswise of the axis about which the socket swings.

VICTOR RIEKE.

Witnesses:

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