This invention relates to a structure commonly known as a hair curling iron and in which a principle of leverage is embodied with a view towards compelling the movable elements of the iron to approach together in parallelism.

Briefly, my novel structure embodies a pair of hand grips which have especially shaped bifurcated end portions wherein a pair of forks are provided, the furcations of the respective forks being disposed in intersecting or crossed relation and pivotally connected together. These furcations have special pivotal and operating connection with especially constructed end portions on the sections or elements of the iron proper in such a way that these elements are caused to approach each other in parallelism in order that the bowed end of the elements may be employed for acting on the hair.

The improved construction is characterized by simplicity, compactness, and convenience and efficiency in construction and operation. It is therefore regarded as a novel contribution to the art.

Other features and advantages of the invention will become apparent from the following description and drawings.

In the accompanying drawings—

Figure 1 is an elevational view showing a complete tool with the jaws or curling elements spread apart.

Fig. 2 is a similar view showing the elements closed and showing the inclusion of a spring.

Fig. 3 is a cross section through the jaws in closed relation.

Fig. 4 is a view like Fig. 2 showing the operating connection more in detail.

Fig. 5 is an edge elevation.

Referring now to the drawings in detail, it will be seen that the reference characters 1 designate, in each instance, a hand-grip of appropriate configuration, and, as before stated, each hand grip is provided with laterally off-set spaced parallel furcations, 2 which co-operate in forming a pair of forks. These furcations are preferably of the outline shown in order that they may function properly. The furcations of the respective forks are disposed in crossed relation and are connected together by the primary pivots

3. The curling iron proper embodies a pair of complementary parts or heating elements, one of which, designated by the reference character 4, is of cylindrical formation and the other of which (5) is of channel-shaped cross section. In this respect the elements are substantially like those now employed on the common form of curling iron. Attention is invited to the fact, however, that the element 4 is provided with a central bore 6 for reception of a removable filler or core member 7. This filler can be removed and an electrode from an electrical heating device can be inserted.

As before indicated the heating elements are especially constructed so that each one is provided at its inner end with a flat extension 7 which is off-set with respect to the longitudinal axis of the body portion of the element. These extensions are located between the furcations and the outer ends of latter are connected by secondary pivots as at 8 thereto. The inner end portions of the extensions are provided with elongated slots 9 of the configuration better shown in Fig. 4. Each slot has a portion disposed in longitudinal alignment with the body portion of the extension and a portion disposed obliquely with respect to the axis. Each slot operates somewhat as a cam. In this connection it will be noted that a connecting end cam including an anti-friction sleeve passes through the furcations to the slots thus providing the desired form of operating connection. If desired, a suitable opening spring 11 may be provided for cooperation with these parts as represented in dotted lines in Fig. 2.

It is obvious from the foregoing description that when the parts are in the relationship shown in Fig. 1 and the hand-grips are grasped and moved together, the initial pivotal action will be about the main primary pivot pin 3. Then the secondary pivotal action will take place about the secondary pivots 8 and owing to the cam action produced by the slots 9 and connecting pins 10, the final movement of the elements 4 and 5 will be such as to cause them to approach each other in parallelism. In this way the full length of these elements may be employed in the treating of the hair which is quite an advantage inasmuch as with the ordinary construction, it is difficult to grasp the hair between the free end portions of the iron section.

By virtue of one pair of furcations being arranged in the other pair thereof, and the furcations of each pair being arranged at opposite sides of and pivotally connected at
8 to the extensions 7 of the elements 4, it will be appreciated that the structure is at once compact and strong and this without being unduly expensive.

5 It is believed that the construction as well as the operation and advantages of this invention will now be clear after considering the description in connection with the accompanying drawings. Therefore, a more lengthy description is thought unnecessary.

Minor changes coming within the field of invention claimed may be resorted to if desired.

I claim:

15 The herein described curling iron comprising a pair of symmetrical hand-grips provided with inwardly and laterally offset forks, one within and intersecting the other and pivotally connected together intermediate their ends by a single primary pindle, a pair of jaw elements, each element being provided at its inner end with a laterally offset flat extension located between the furcations of one fork, secondary pindles connecting the outer end portions of the extensions with the corresponding end portions of the fork furcations, and cam pin and slot connections between the inner ends of the extensions and furcations, said cam connections located at points spaced inwardly from the primary pindles.

In testimony whereof I affix my signature.

JOHN C. MEAD.