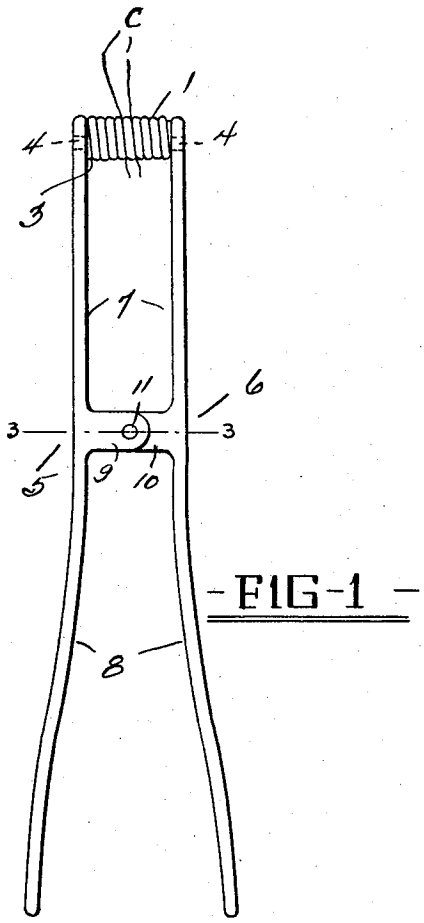
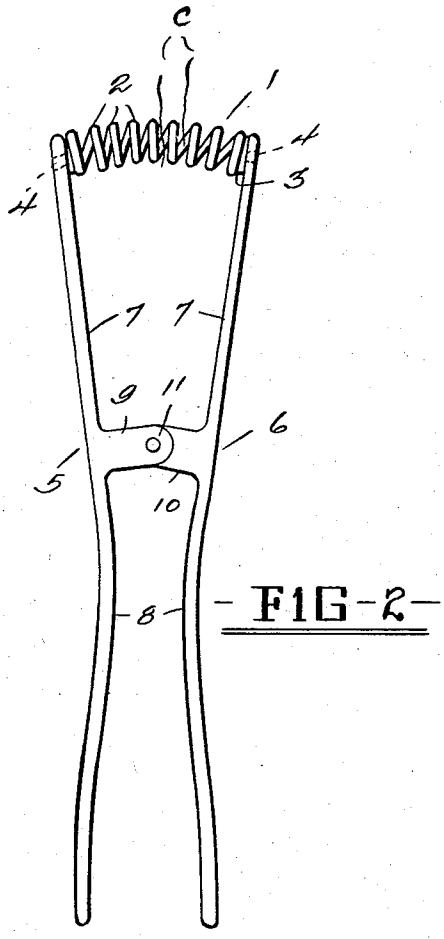
Jan. 14, 1930. M. BINZ 1,743,590

HAIR PULLER

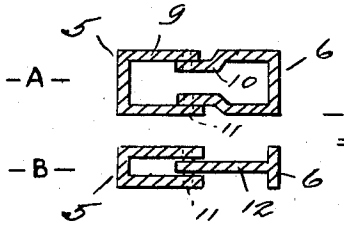
Filed Nov. 14, 1928



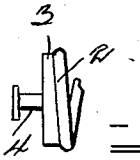
- FIG-1 -



- FIG-2 -



- FIG -3 -



- FIG -4 -

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Patented Jan. 14, 1930 1,743,590

UNITED STATES PATENT OFFICE

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HAIR PULLER

Application filed November 14, 1928. Serial No. 319,246.

My present invention, in its broad aspect, has reference to improvements in devices for pulling or removing hairs from the skin of the face, head, scalp, or other portions of the human anatomy, and more particularly it is my purpose to provide a device of this type which will not pinch or engage the skin or flesh, and which will engage or grasp firmly one or more hairs so that they may be removed with little discomfort and without irritation, or other disadvantageous after effects. Furthermore, my invention is simple in construction, and can be kept sterile and clean, will not get out of repair and can be sold and manufactured at relatively small cost.

My invention contemplates the utilization of a spring, between the convolutions of which a hair or hairs is adapted to be firmly engaged, and my construction prevents pinching the flesh or skin between the convolutions of the spring when the device is used. My invention has but three major parts; two elements of a handle operating member, and the spring element which is carried between the two and which is normally maintained in a closed position, and opened (that is the convolutions are stretched apart) upon applying pressure to the handles; furthermore, when the handle elements are pressed together the spring is elongated in such a manner that it is slightly bowed so that a better, and closer grip can be obtained, and so that one or a few hairs can be engaged with greater facility; the convolutions of the spring are naturally circular in cross-section and the spring is never sufficiently elongated in practice to pinch the skin or flesh therebetween.

Other objects and purposes will be apparent as the detailed description of the parts of my hair puller proceeds, but the scope of the invention is to be determined by reference to the claims appended hereunto.

In the drawings wherein is illustrated the preferred embodiment of my invention;—

Figure 1 is an enlarged view of my device in a closed position;

Figure 2 is an enlarged view of my device in an open position;

Figure 3, Views A and B are sections through the pivotal connections of the handle elements, and

Figure 4 is a detail view of the manner of mounting the spring ends on the handle elements.

In the drawings wherein like characters of reference are used to designate like or similar parts throughout the several views:—

The numeral (1) designates a small steel tensile spring, between the convolutions (2) of which a hair or hairs are adapted to be engaged. The ends of the spring are braised or soldered to plates (3) which are connected by pins or rivets (4) to the ends of handle and operating elements (5) and (6). The elements (5) and (6) have jaw portions (7) which are substantially parallel when the device is closed as in Figure 1, and handle portions (8); each element also has an ear intermediate its ends, or a pair of ears, and these are hinged together. As shown in View A of Figure 3, handle element (5) has a pair of spaced ears (9) between which is received the ears (10) of handle element (6); pins (11) being provided to form a pivoted connection. In View B of Figure 3, but one ear (12) is provided on handle element (6). The form of connection between the handle elements forms no part of my invention, and any one of several pivoted connections such as the two above defined may be employed. Upon reference to Figure 2 it will be noted that the tendency of the spring (1) is to bow out when opened; the radius of the bow being the axis defined by the pin (11). This enables one to grasp a hair or a few hairs with greater facility. In the views of the drawings the device is shown greatly enlarged, and in practice the space between the convolutions of the spring (1) is much less.

In operation, hair or hairs, designated C in the drawings, is grasped between the convolutions of the spring (1) after the manner shown in Figure 2, and when pressure on the handles is relaxed the convolutions close to the position shown in Figure 1 securely grasping the hairs so that they may be removed. While my device is especially described for use in removing hair it has other purposes since it can be used to grasp hang-nails, lint,

or any small protruding objects. Furthermore, in removing hairs and the like, the skin and flesh are not appreciably irritated, and my device can be kept sterile and clean since it has no concealed or intricate parts. Therefore while the combination and arrangement of elements hereinbefore described constitute the preferred embodiments of my hair puller, it is nevertheless desired again to emphasize the fact that interpretation of the scope of the invention should only be conclusive when made in the light of the subjoined claims.

I claim:—

1. In a device of the character described, a pair of pivoted handle elements having spaced jaw portions, a tensile spring between the jaws normally urging the jaws together, and the convolutions of the spring being separated and slightly bowed outwardly when the handle elements are pressed together to engage an object to be grasped.

2. A hair puller comprising a tight tensile spring, and pivoted elements for separating the convolutions of the spring so that there is a slightly greater distance between adjacent turns of wire on the side of the spring removed from the pivoted elements whereby tips of hairs may be engaged thereby.

3. A hair puller comprising a spring, and pivoted elements for separating the convolutions of the spring to engage a hair therebetween, said spring being bowed when open.

4. A hair puller comprising a pair of operation elements having handle and jaw portions, a spring between the jaw portions at the ends thereof and the convolutions of which are opened a slightly greater distance on one side of the spring than on the other side thereof when the handle portions are pressed together to engage a hair or hairs therebetween.

5. A device of the character described, comprising a pair of operating elements pivotally connected together intermediate their extremities; the portions of said elements on one side of the pivoting means constituting jaws, and the other portions handles; a tight, steel, tensile spring having its ends connected to the jaw portions at their ends, and said spring being slightly bowed and the convolutions opened more on one side of the spring than on the other when the handles are pressed together and the jaws moved apart.

In testimony whereof, I affix my signature hereunto.

MATILDE BINZ.