

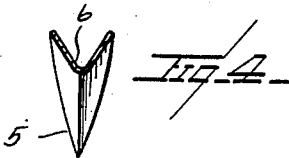
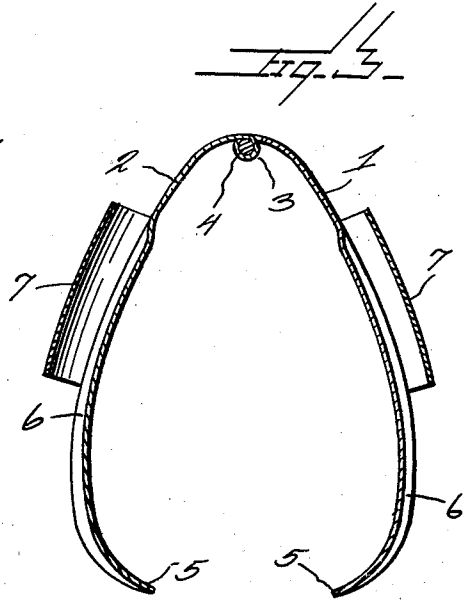
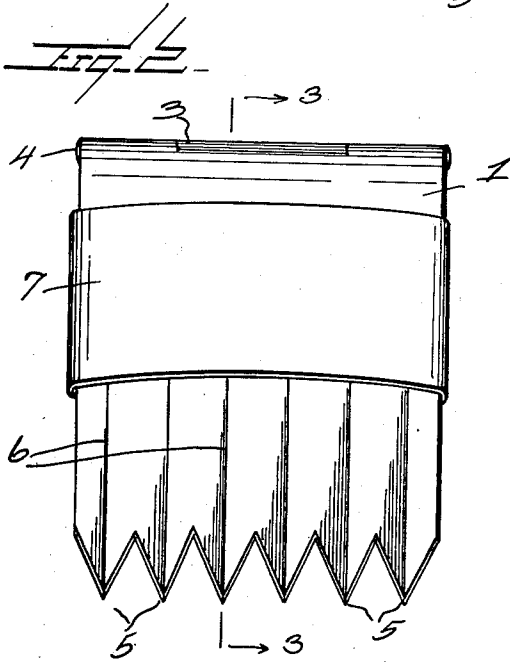
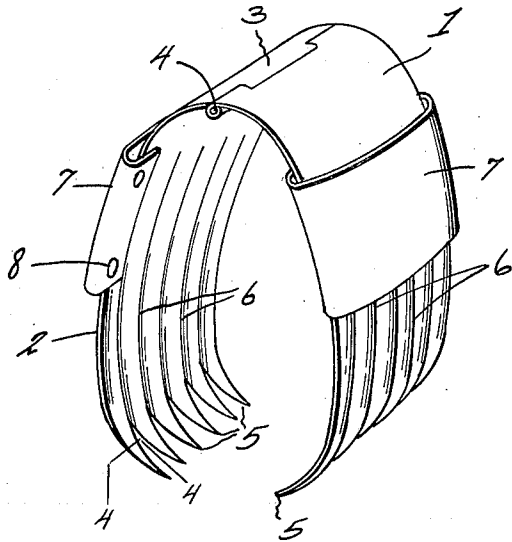
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HANDLING IMPLEMENT

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HANDLING IMPLEMENT

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4 Claims. (Cl. 294—25)

This invention relates to improvements in handling implements or devices and pertains particularly to a device designed to fit in the hand and to facilitate grasping bodies without touching the same with the hands.

The primary object of the present invention is to provide a gripping or handling device which is designed to be held in the palm of the hand and which is made up of two relatively movable jaw members, one of which is adapted for connection with the fingers while the other is connected with the thumb and such members are relatively actuated by opening and closing the hand whereby they may be employed to grip and pick up any objects or bodies which may be injurious to the hand or which one does not wish to touch with the hand.

Another object of the invention is to provide a gripping device of the above described character in which the two bodies are hingedly coupled together and are provided with opposed teeth whereby a firm hold may be obtained upon an object by pressing the two bodies together in substantially the same manner that the thumb and fingers of a hand are brought together in the process of picking up an object, thereby insuring the firm grasping of the object so that it may be handled with ease.

Still another object of the invention is to provide in a device of the above described character, means facilitating the connection or attachment of the two bodies making up the gripping implement, to the fingers and the thumb of a hand whereby the implement may be easily retained in position in the hand while the two parts thereof are being opened or closed in the process of picking up and releasing objects.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not to be confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

Fig. 1 is a view in perspective of the device embodying the present invention.

Fig. 2 is a view in side elevation of the same.

Fig. 3 is a section on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view on the line 4—4 of Fig. 1, through one of the teeth.

Referring now more particularly to the drawing, it will be seen that the handling implement embodying the present invention comprises the two main body portions 1 and 2, which may be formed of any suitable strong and rigid material such as sheet metal or the like. These bodies are generally of rectangular outline and are preferably slightly longitudinally arcuate as shown or, if desired, each body may be substantially straight intermediate its ends and may have a portion of each end turned laterally so as to give a general suggestion of a longitudinally arcuate form.

Across one end of each of the bodies there is formed a hinge element 3 which constitutes an integral rolled in portion of the edge of the body, one of the hinge elements here being shown as being made up in the form of two alined sleeves which are in spaced relation while the hinge element of the other body constitutes a single sleeve which is disposed at the longitudinal center of the body and which is designed to be interposed between the two sleeves of the first body, the alined sleeves receiving a hinge pin 4 by which the bodies are pivotally coupled together for relative oscillatory movement on an axis extending transversely thereof. The connection of the bodies is such that the concave sides of the bodies are in opposed relation.

The opposite end edges of the two bodies 1 and 2 are formed to provide the inwardly turned teeth or claws 5 and for the purpose of strengthening the bodies, each is longitudinally corrugated or fluted at the end in which the teeth 5 are formed, as indicated at 6. The teeth are substantially V-shaped in cross section, each tooth being formed with a flute or corrugation extending longitudinally thereof and to its point. By this means a substantial degree of rigidity is given to each tooth even though the body from which the tooth is formed may be made of relatively light sheet metal. It will be readily seen that in oscillating the bodies 1 and 2 relative to one another, the points or tips of the teeth will be brought together so that an object may be firmly gripped between the two bodies.

In order to facilitate holding the gripping device in the hand with the hinge in the palm of the hand, each of the bodies is provided with the transversely extending relatively wide flexible band 7. These bands may be of leather or woven fabric as may be desired and as shown, each has its ends turned in against the inner face of the body to which it is attached, and secured

to the body in any suitable manner as by the use of rivets 8 or the like.

In the use of the present device, it will be readily apparent that if the fingers of the hand are slipped under one strap or band 7 and the hinge portion of the device is disposed in the palm of the hand, the thumb of that hand may be readily inserted under the strap of the other body and, therefore, when the hand is opened or closed as in the act of gripping an object, the toothed end edges of the two bodies will be separated or brought together as may be desired and, therefore, these teeth may be employed as gripping jaws for picking up objects which might injure or soil the hand.

What is claimed is:

1. An object handling or gripping implement, comprising a pair of elongated substantially rectangular bodies, each of said bodies having a substantially arcuate form longitudinally, means forming a hinge connection between two adjacent end edges of the bodies whereby said bodies lie in side by side relation with the concave sides thereof opposed, means forming gripping teeth along the other end edge of each body, said gripping teeth of each body being curved inwardly toward the teeth of the other body, and means carried by each body facilitating the engagement of the fingers and the thumb of a hand with the two bodies in a manner to position the hinge connection between the bodies in the palm of the hand and to facilitate relatively moving the bodies to move the teeth into and out of gripping relation, the said means comprising a strap of flexible material extending transversely of each body upon the side thereof remote from the other body and secured at its ends to the body across which it extends.

2. An object handling or gripping implement, comprising a pair of elongated substantially rectangular bodies, each of said bodies having a substantial arcuate form longitudinally, means forming a hinge connection between two adjacent end edges of the bodies whereby said bodies lie in side by side relation with the concave sides thereof opposed, means forming gripping teeth along the other end edge of each body, said gripping teeth of each body being curved inwardly toward

the teeth of the other body, and means carried by each body facilitating the engagement of the fingers and the thumb of a hand with the two bodies in a manner to position the hinge connection between the bodies in the palm of the hand and to facilitate relatively moving the bodies to move the teeth into and out of gripping relation, the said bodies being formed of sheet metal and each of the bodies being provided with longitudinally extending flutes each of which extends longitudinally of a tooth to give to the tooth a cross section of substantially V-form.

3. A handling device of the character stated, comprising a pair of bodies having two adjacent end edges hingedly coupled together, the bodies normally lying in side by side relation, each body being longitudinally corrugated from the other end thereof through a part of the length of the body, each body having the said other corrugated end curved inwardly toward the other body, the said curved end of each body being deeply notched throughout its width forming gripping teeth each of which has a ridge of a corrugation extending centrally thereof thereby forming each tooth of V-cross section, and means carried by the two bodies for engagement by the fingers and the thumb of the hand for facilitating holding the implement in the hand and moving the bodies relatively to one another.

4. A handling device of the character stated, comprising a pair of bodies having two adjacent end edges hingedly coupled together, the bodies normally lying in side by side relation, each body being longitudinally corrugated from the other end thereof through a part of the length of the body, each body having the said other corrugated end curved inwardly toward the other body, the said curved end of each body being deeply notched throughout its width forming gripping teeth each of which has a ridge of a corrugation extending centrally thereof and with the high side of the ridge directed toward the other body, and means carried by the two bodies for engagement by the fingers and thumb of the hand for facilitating holding the implement in the hand and moving the bodies relatively to one another.

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