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(54) **Notched single-edge thinning scissors**

Effilierschere

Ciseaux d'effilage

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(2003-10-14)

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Description

1. Field of the Invention

[0001] The present invention relates to scissors and more particularly, to a notched single-edge thinning scissors that has rounded edges formed in the notched blades around the notches for supporting the hair not to be cut without causing damage to the hair not to be cut.

2. Description of the Related Art

[0002] A conventional notched single-edge thinning scissors **A** (see FIGS. 1 and 2) is comprised of a first scissors member **100** and a second scissors member **200** pivotally connected together with a pivot **300**. The first scissors member **100** has a handle (ring handle) **101** at one end and a blade **102** at the other end. The blade **102** has a contact side **106**, a distal side **107**, and a notched edge formed of teeth **103** and notches **104**. The width of the notches **104** is designed subject to the amount of the hair not to be cut during trimming (the design shown in FIG. 1 has relatively wider notches; the design shown in FIG. 2 has relatively narrow notched). Each tooth **103** has a cutting edge **105**. The second scissors member **200** has a handle **201** at one end and a blade **202** at the other end. The blade **202** is a cutting blade having a cutting side **203** and a distal side **204** opposite to the cutting side **203**. When closing the thinning scissors **A**, the cutting side **203** of the blade **202** of the second scissors member **200** is moved over the cutting edges **105** of the teeth **103** and the contact side **106** of the blade **102** of the first scissors member **100** to cut the hair. This design of notched single-edge thinning scissors is still not satisfactory in function. Because the intersected areas between the contact side **106** and distal side **107** of the blade **102** and the left and right sidewalls and bottom walls of the notches **104** are aligned in line **X** (see FIGS. 3 and 4), the hair not to be cut may be jammed in line **X**, i.e., in the intersected areas between the contact side **106** and distal side **107** of the blade **102** and the left and right sidewalls and bottom walls of the notches **104** during trimming, thereby causing damage to the hair not to be cut.

[0003] JP 2003 290572 discloses combing scissors which do not damage the hair intruding into comb grooves between comb blades and do not give rise to hooking to the hair in spite of such a motion as to remove the combing scissors from the air while the air is held put into the combing grooves. In these scissors, the peripheral edges of the combing grooves are bevelled, which would form a gap on each side while the edges abut against the blade. Therefore, the hair would be clipped by these gaps, thus the hairdressing scissors couldn't separate swimmingly and obstruct the cutting accordingly. Moreover, the bevelled peripheral edges are formed with sharp edges, which can hurt and broke the hair when the thinning scissors are in use.

[0004] DE 85 13 958 discloses notched double-edged thinning scissors, each notch having a left sidewall, a right sidewall, and a bottom wall. This document does not disclose chamfered peripheral edges formed in the notched blade between the hair contact of the notched blade and the left sidewall, right sidewall and bottom side-wall of each notch.

SUMMARY OF THE INVENTION

[0005] The present invention has been accomplished under the circumstances in view.

[0006] It is the main object of the present invention to provide a notched single-edge thinning scissors that eliminates the drawback of the aforesaid prior art design.

[0007] To achieve this and other objects of the present invention, the notched single-edge thinning scissors comprises a first scissors member and a second scissors member pivotally connected together with a pivot. The first scissors member and the second scissors member each have a handle at one end thereof and a blade at an opposite end thereof. The blade of the first scissors member has a contact side, a distal side opposite to the contact side, and a notched edge formed of teeth and notches. Each tooth has a cutting edge. The blade of the second scissors member has a cutting side and a distal side opposite to the cutting side. The notches of the blade of the first scissors member define with the blade of the second scissors member a hair receiving space. Each notch has a left sidewall, a right sidewall, and a bottom wall. The contact side and distal side of the blade of the first scissors member each have first rounded edges, second rounded edges and third rounded edges respectively connected to the left sidewall, right sidewall and bottom wall of each notch. The blade of the first scissors member has a plurality of rounded chamfered edges formed in the intersected areas between the cutting edges and the left and right sidewalls of each notch.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008]

FIG. 1 is a plain view of a notched single-edge thinning scissors according to the prior art.

FIG. 2 is a plain view of another notched single-edge thinning scissors according to the prior art.

FIG. 3 is a sectional view taken along line R-R of FIG. 1.

FIG. 4 is a sectional view taken along line P-P of FIG. 1.

FIG. 5 is a perspective view of a notched single-edge thinning scissors according to the present invention.

FIG. 6 is a perspective view in an enlarged scale a part of the present invention.

FIG. 7 is a sectional view taken along line F-F of FIG. 11.

FIG. 8 is a sectional view taken along line E-E of

FIG. 6.

FIG. 9 is similar to FIG. 7 but showing the blades of the two scissors members moved relative to each other.

FIG. 10 is similar to FIG. 8 but showing the blades of the two scissors members moved relative to each other.

FIG. 11 corresponds to FIG. 6 but viewed from another side.

FIG. 12 is a perspective view in an enlarged scale of a part of the present invention showing rounded edges formed in the intersected areas between the cutting edges and the left and right sidewalls (I).

FIG. 13 is a perspective view in an enlarged scale of a part of the present invention showing rounded edges formed in the intersected areas between the cutting edges and the left and right sidewalls (II).

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0009] Referring to FIGS. 5 and 6, a notched single-edge thinning scissors **B** in accordance with the present invention is shown comprised of a first scissors member **10** and a second scissors member **20** pivotally connected together with a pivot **30**. The first scissors member **10** has a handle (ring handle) **11** at one end and a blade **12** at the other end. The blade **12** has a notched blade having a contact side **15**, a distal side **16** opposite to the contact side **15**, and a notched edge formed of teeth **13** and notches **14**. The teeth **13** each have a cutting edge **17**. The second scissors member **20** has a handle (ring handle) **21** at one end and a blade **22** at the other end. The blade **22** is a cutting blade having a cutting side **23** and a distal side **24** opposite to the cutting side **23**. When closing the thinning scissors **B**, a hair receiving space **C** is defined between the notches **14** of the blade **12** of the first scissors member **10** and the blade **22** of the second scissors member **20** (see FIGS. 6 and 11). Each notch **14** has a left sidewall **141**, a right sidewall **142**, and a bottom wall **143**. The contact side **15** of the blade **12** has a first edges **151**, second rounded edges **152** and third rounded edges **153** respectively connected to the left sidewall **141**, right sidewall **142** and bottom wall **143** of each of the notches **14** (see FIG. 7). The distal side **16** of the blade **12** has a first rounded edges **161**, second rounded edges **162** and third rounded edges **163** respectively connected to the left sidewall **141**, right sidewall **142** and bottom wall **143** of each of the notches **14** (see FIG. 8). When closing the thinning scissors **B**, the cutting side **23** of the blade **22** of the second scissors member **20** is moved over the cutting edges **17** of the teeth **13** and the contact side **15** of the blade **12** of the first scissors member **10** to cut the hair (see FIG. 6).

[0010] When trimming the hair, the blades **12**, **22** of the two scissors members **10**, **20** are moved relative to each other in proximity, and the cutting side **23** of the blade **22** of the second scissors member **20** is continu-

ously maintained in contact with the cutting edges **17** and the contact side **15**, and therefore the cutting side **23** and the cutting edges **17** of the blade **12** of the first scissors member **10** work to cut the hair. The cut-off hair **H** falls along the cutting edges **17** (see FIG. 9). At this time, the notches **14** and the hair receiving space **C** receive the hair not to be cut **H1**. During trimming, the hair not to be cut **H1** being received in the notches **14** and the hair receiving space **C** is maintained in "sliding" contact with the rounded edges **151~153** and the rounded edges **161~163**, preventing damage (see FIGS. 9 and 10).

[0011] Referring to FIGS. 12 and 13, rounded edges **171a** are formed in all intersected areas between the cutting edges **17** and the left and right sidewalls **141**, **142** of the notches **14** (see FIG. 12) or rounded edges **171b** of which is formed in the bottom side of each intersected area between the cutting edges **17** and the left and right sidewalls **141**, **142** of the notches **14** (see FIG. 13) for supporting the hair not to be cut **H1** during trimming.

[0012] As indicated above, by means of the rounded edges **151~153**, **161~163**, **171**, the hair not to be cut **H1** being received in the notches **14** and the hair receiving space **C** is maintained in "sliding" contact with the rounded edges **151~153**, **161~163**, **171**, and therefore the hair not to be cut **H1** can smoothly be moved away from the thinning scissors **B** without damage during trimming.

[0013] Although a particular embodiment of the invention has been described in detail for purposes of illustration, various modifications and enhancements may be made without departing from the spirit and scope of the invention.

Claims

1. A notched single-edge thinning scissors (**B**) comprising a first scissors member (**10**) and a second scissors member (**20**) pivotally connected together with a pivot (**30**), said first scissors member (**10**) and said second scissors member (**20**) each having a handle (**11**, **21**) at one end thereof and a blade (**12**, **22**) at an opposite end thereof, the blade (**12**) of said first scissors member (**10**) having a contact side (**15**), a distal side (**16**) opposite to said contact side (**15**), and a notched edge formed of teeth (**13**) and notches (**14**), said teeth (**13**) each having a cutting edge (**17**), the blade (**22**) of said second scissors member (**20**) having a cutting side (**23**) and a distal side (**24**) opposite to said cutting side (**23**), said notches (**14**) of the blade (**12**) of said first scissors member (**10**) defining with the blade (**22**) of said second scissors member (**20**) a hair receiving space (**C**), each said notch (**14**) having a left sidewall (**141**), a right sidewall (**142**), and a bottom wall (**143**); characterized in that the contact side (**15**) of the blade (**12**) of said first scissors member (**10**) has first rounded edges (**151**), second rounded edges (**152**) and third rounded edges (**153**) respectively connect-

ed to the left sidewall (141), right sidewall (142) and bottom wall (143) of each said notch (14) within said hair receiving space (C) and also the distal side (16) of the blade (12) of said first scissors member (10) has first rounded edges (161), second rounded chamfered edges (162) and third rounded edges (163) respectively connected to the left sidewall (141), right sidewall (142) and bottom wall (143).

2. The notched single-edge thinning scissors (B) as claimed in claim 1, **characterized in that** the blade (12) of said first scissors member (10) has a plurality of rounded edges (171a) formed in the intersected areas between said cutting edges (17) and the left and right sidewalls (141, 142) of each said notch (14).
3. The notched single-edge thinning scissors (B) as claimed in claim 1, **characterized in that** the blade (12) of said first scissors member (10) has a plurality of rounded edges (171b) of which each is formed in a bottom side of each intersected area between said cutting edges (17) and the left and right sidewalls (141, 142) of each said notch (14).

Patentansprüche

1. Eine Effilierschere (B) mit einem ersten Scherenglied (10) und einem zweiten Scherenglied (20), die mit einer Drehachse (30) drehbar miteinander verbunden sind, wobei das genannte erste Scherenglied (10) und das genannte zweite Scherenglied (20) jeweils einen Griff (11, 21) an dessen einem Ende und eine Schneide (12, 22) an dessen einem gegenüberliegenden Ende aufweist, wobei die Schneide (12) des genannten ersten Scherengliedes (10) eine Kontaktseite (15), eine distale Seite (16) gegenüber der besagten Kontaktseite (15) und eine eingekerbte, aus Zähnen (13) und Kerben (14) bestehende Kante aufweist, wobei die genannten Zähne (13) jeweils eine Schneidkante (17) aufweisen, die Schneide (22) des genannten zweiten Scherengliedes (20) eine Schnittseite (23) und eine distale Seite (24) gegenüber der besagten Schnittseite (23) aufweist, wobei die genannten Kerben (14) der Schneide (12) des ersten Scherengliedes (10) mit der Schneide (22) des zweiten Scherengliedes (20) einen Haaraufnahmeraum (C) definieren, wobei jede genannte Kerbe (14) eine linke Seitenwand (141), eine rechte Seitenwand (142) und eine Bodenwand (143) aufweist;
gekennzeichnet dadurch, dass die Kontaktseite (15) der Schneide (12) des genannten ersten Scherengliedes (10) erste abgerundete Kanten (151), zweite abgerundete Kanten (152) und dritte abgerundete Kanten (153) hat, die jeweils mit der linken Seitenwand (141), der rechten Seitenwand (142)

und der Bodenwand (143) von jeder genannten Kerbe (14) innerhalb des besagten Haaraufnahmeraums (C) verbunden sind und auch die distale Seite (16) der Schneide (12) des genannten ersten Scherengliedes (10) erste abgerundete Kanten (161), zweite abgerundete Kanten (162) und dritte abgerundete Kanten (163) hat, die jeweils mit der linken Seitenwand (141), der rechten Seitenwand (142) und der Bodenwand (143) über die Schneidkanten (17) hinaus verbunden sind.

2. Effilierschere (B) nach Anspruch 1, **gekennzeichnet dadurch, dass** die Schneide (12) des genannten ersten Scherengliedes (10) eine Vielzahl von abgerundeten Kanten (171a) aufweist, die in den sich kreuzenden Zonen zwischen den genannten Schneidkanten (17) und der linken und der rechten Seitenwand (141, 142) der jeweiligen besagten Kerbe (14) ausgebildet sind.
3. Effilierschere (B) nach Anspruch 1, **gekennzeichnet dadurch, dass** die Schneide (12) des genannten ersten Scherengliedes (10) eine Vielzahl von abgerundeten Kanten (171b) aufweist, wobei jede der abgerundeten Kanten in einer unteren Seite von der jeweiligen sich kreuzenden Zone zwischen den besagten Schneidkanten (17) und der linken und der rechten Seitenwand (141, 142) der jeweiligen besagten Kerbe (14) ausgebildet sind.

Revendications

1. Ciseaux d'effilage (B) comprenant un premier élément de ciseaux (10) et un second élément de ciseaux (20) reliés à pivotement par un pivot (30), le premier élément de ciseaux (10) et le second élément de ciseaux (20) comportant chacun une poignée (11, 21) à une extrémité et une lame (12, 22) au niveau de l'extrémité opposée, la lame (12) dudit premier élément de ciseaux (10) présentant une face de contact (15), une face distale (16) en vis-à-vis de ladite face de contact (15), et un bord crénelé constitué de dents (13) et d'encoches (14), lesdites dents (13) présentant un bord de coupe (17), la lame (22) dudit second élément de ciseaux (20) comportant une face de coupe (23) et une face distale (24) en vis-à-vis de ladite face de coupe (23), lesdites encoches (14) de la lame (12) dudit premier élément de ciseaux (10) délimitant avec la lame (22) dudit second élément de ciseaux (20) un espace de réception des cheveux (C), chaque encoche (14) présentant une paroi latérale gauche (141), une paroi latérale droite (142), et une paroi de fond (143);
caractérisés en ce que la face de contact (15) de la lame (12) dudit premier élément de ciseaux (10) présente des premiers bords arrondis (151), des seconds bords arrondis (152) et des troisièmes bords

arrondis (153) respectivement associés à la paroi latérale gauche (141), à la paroi latérale droite (142) et à la paroi de fond (143) de chacune desdites encoches (14) dans ledit espace de réception des cheveux (C) et **en ce que** la face distale (16) de la lame (12) dudit premier élément de ciseaux (10) présente des premiers bords arrondis (161), des seconds bords arrondis (162) et des troisièmes bords arrondis (163) respectivement associés à la paroi latérale gauche (141), à la paroi latérale droite (142) et à la paroi de fond (143).

2. Ciseaux d'effilage (B) selon la revendication 1, **caractérisés en ce que** la lame (12) dudit premier élément de ciseaux (10) présente une pluralité de bords arrondis (171a) formés dans les zones d'intersection situées entre lesdits bords de coupe (17) et les parois latérales gauches et droites (141, 142) de chaque encoche (14).
3. Ciseaux d'effilage (B) selon la revendication 1, **caractérisés en ce que** la lame (12) dudit premier élément de ciseaux (10) présente une pluralité des bords arrondis (171b) dont chacun est formé sur une face inférieure de chaque zone d'intersection située entre lesdits bords de coupe (17) et les parois latérales gauches et droites (141, 142) de chaque encoche (14).

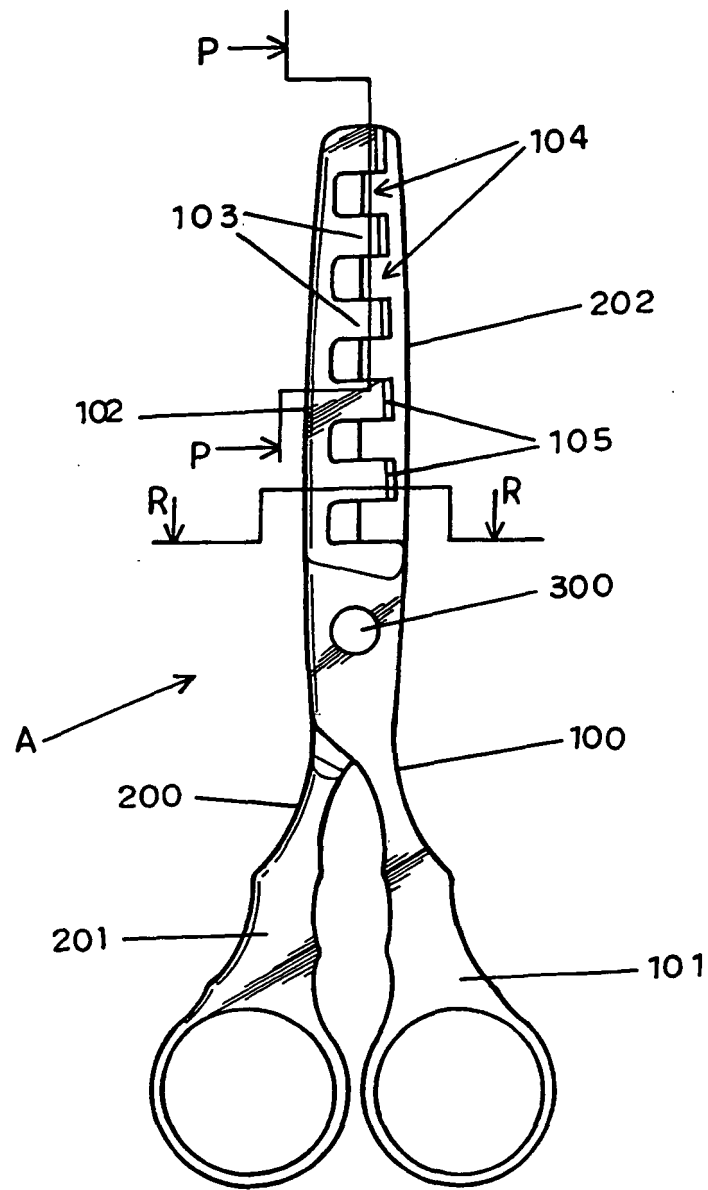


Fig.1(Prior Art)

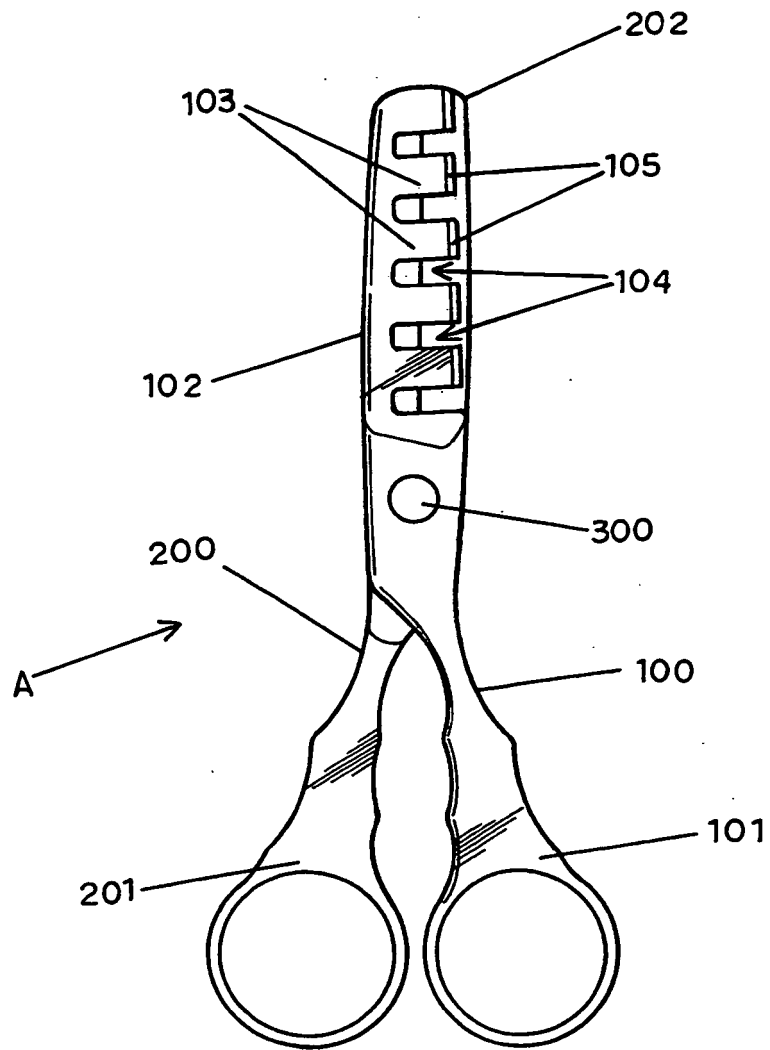


Fig.2(Prior Art)

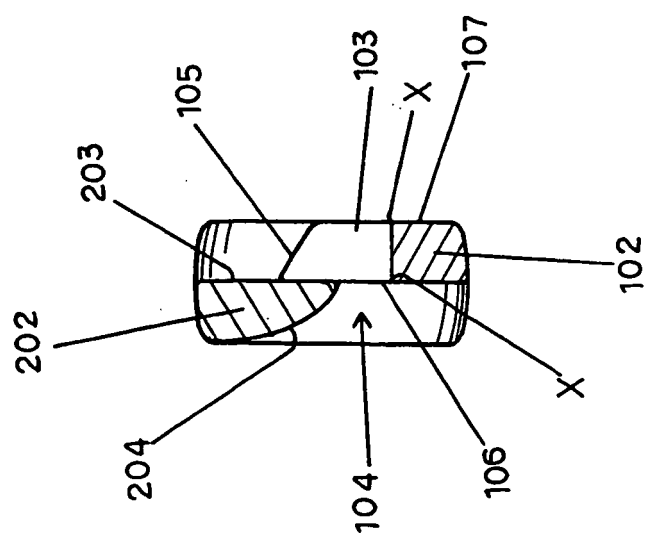


Fig. 3(Prior Art)

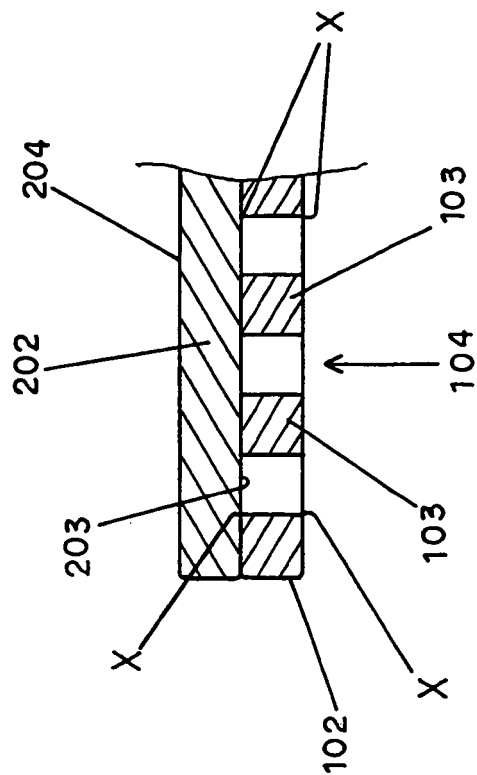


Fig. 4(Prior Art)

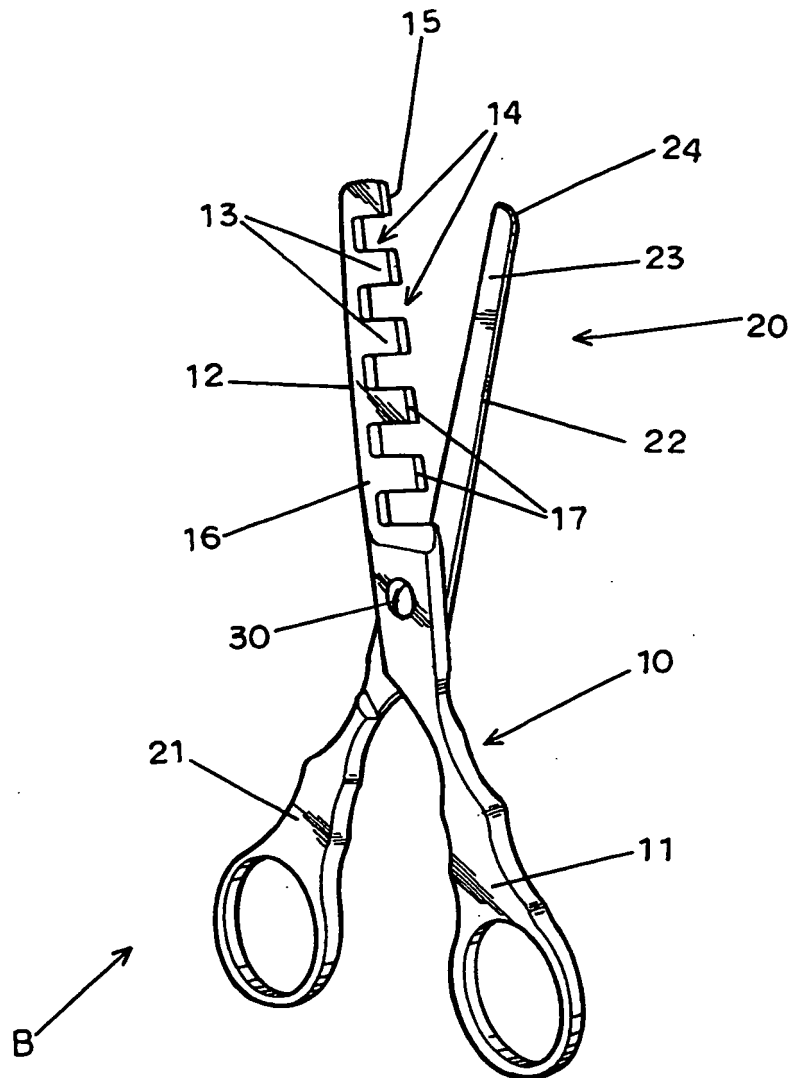


Fig.5

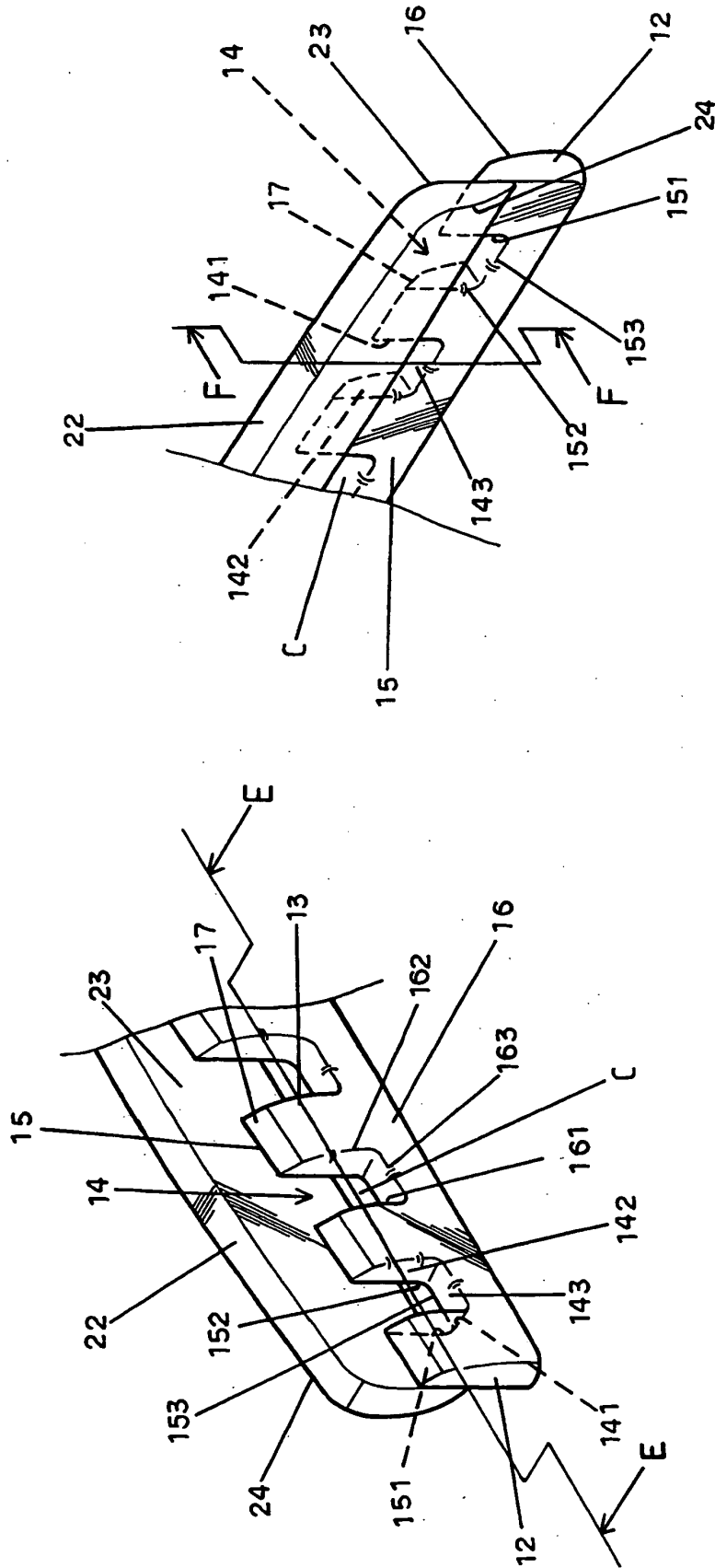


Fig.6

Fig.11

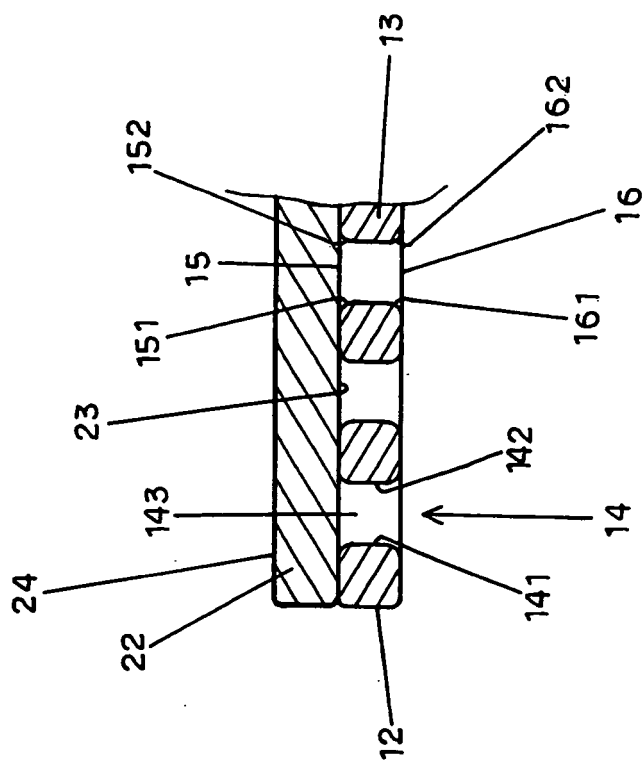


Fig. 7

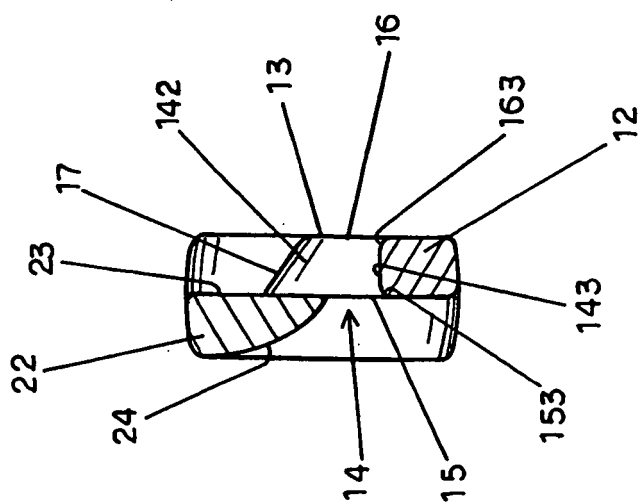


Fig. 8

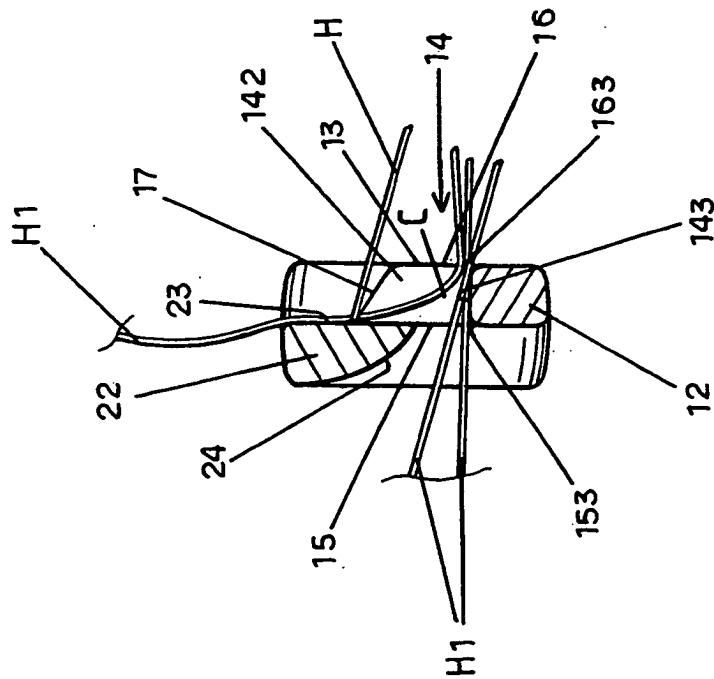


Fig.9

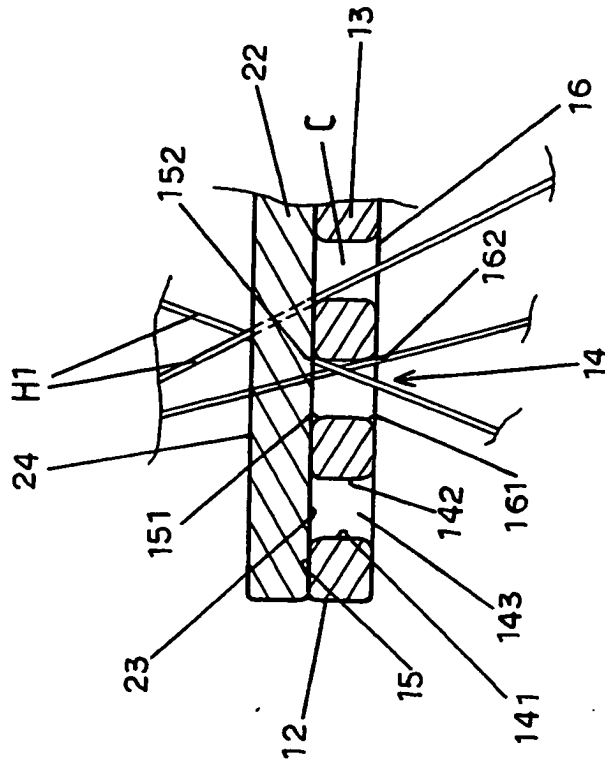


Fig.10

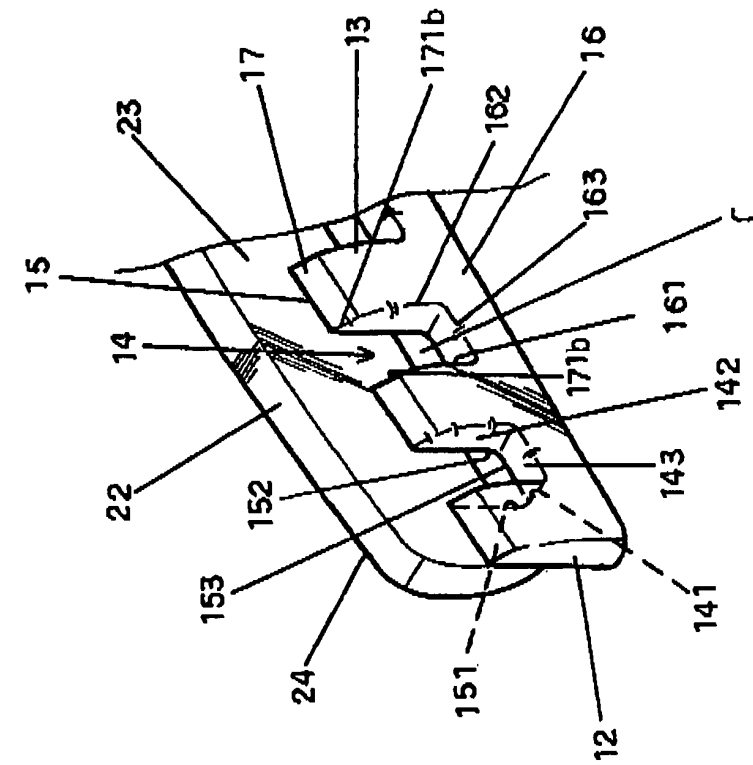


Fig. 13

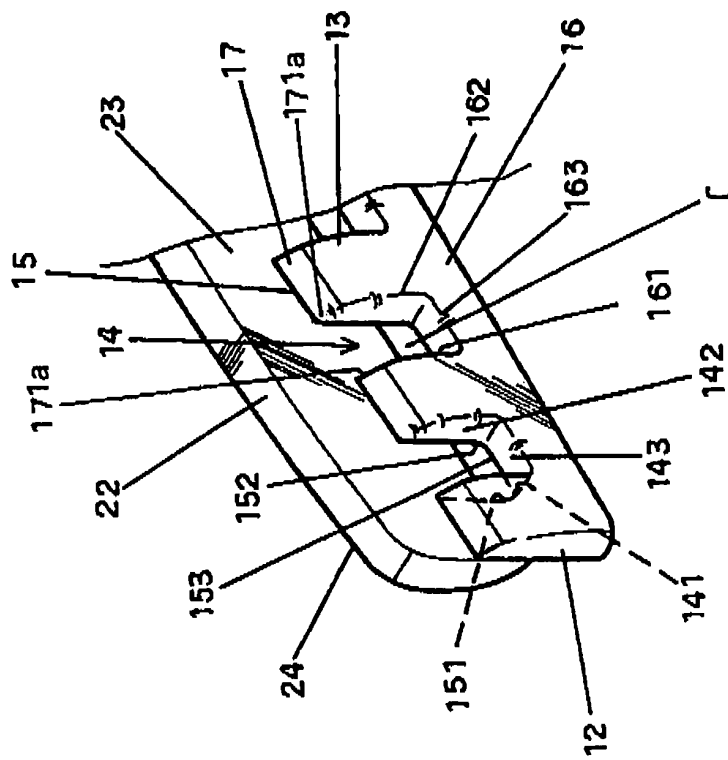


Fig.12

REFERENCES CITED IN THE DESCRIPTION

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