United States Patent [19]

Rubin

[11] **3,716,057**

[45] **Feb. 13, 1973**

[54] GUARDED DORSAL OSTEOTOME WITH STABILIZER

[76] Inventor: **Frank F. Rubin,** 795 Southern Artery, Quincy, Mass. 02169

[22] Filed: **April 13, 1970**

[21] Appl. No.: **28,185**

Related U.S. Application Data

[63] Continuation of Ser. No. 660,766, Aug. 15, 1967, abandoned.

[52] **U.S. Cl.**.....**128/305 R,** 30/168, 30/169, 30/294

[51] **Int. Cl.**.....**A61b 17/16**

[58] **Field of Search**.....128/304, 305, 312, 321; 30/168, 169, 294, 312, 314, 317

[56] **References Cited**

UNITED STATES PATENTS

522,548	7/1894	Arthur	30/168
2,029,495	2/1936	Lowe	128/305
701,503	6/1902	Plummer	30/169
1,546,975	7/1925	Feller	30/294 X
2,669,993	2/1954	Curutchet	128/321
2,764,814	10/1956	Jecker	30/294
3,221,744	12/1965	Stryker	128/305

FOREIGN PATENTS OR APPLICATIONS

1,094,820	12/1954	France	128/305

OTHER PUBLICATIONS

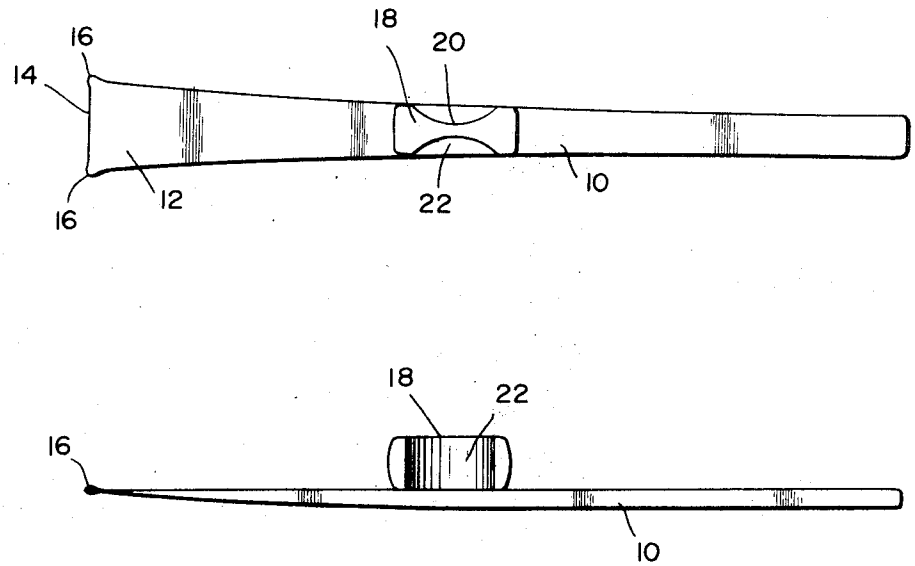
"A Comprehensive Guide to Purchasing" by Mueller & Co.; 1964 Chicago; pg. 379.
Ibid; at page 577.
Ibid; at page 435.
"Surgical Instruments" by Lawton Co., Inc. (New York); 1956; page 219.
Ibid, at page 423.
Ibid, at page 429.
Mueller & Co. Ibid at page 483.

Primary Examiner—Richard C. Pinkham
Assistant Examiner—Richard J. Apley
Attorney—Morse, Altman & Oates

[57] **ABSTRACT**

A chisel for cutting bony tissue has a sharp cutting edge at one end. At the ends of the edge are slightly thickened and rounded elements which guard against accidental side-slips of the cutting end of the chisel. The slightly thickened ends which are called Guards also show the depth and position of the chisel in the bone. Its purpose is to prevent removing too much nasal bone as well as to prevent the chisel from cutting the skin along the edge of the chisel. A gripping element to be grasped by the thumb and a finger at an intermediate point on the chisel is effective in preventing deflection of the cutting end of the chisel by the grain of the bony tissue, which could result in removing bone from the nasal dorsum in an oblique manner.

1 Claim, 2 Drawing Figures



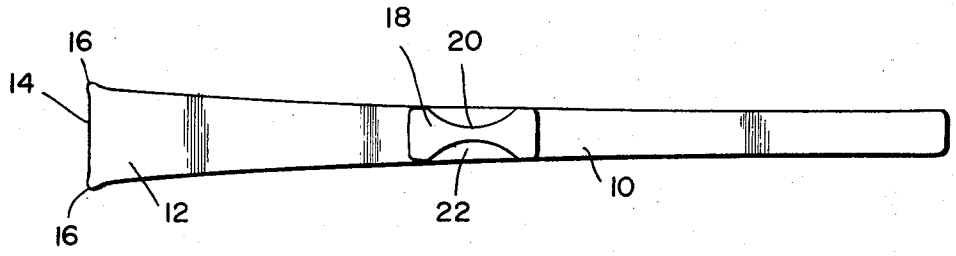


FIG. 1

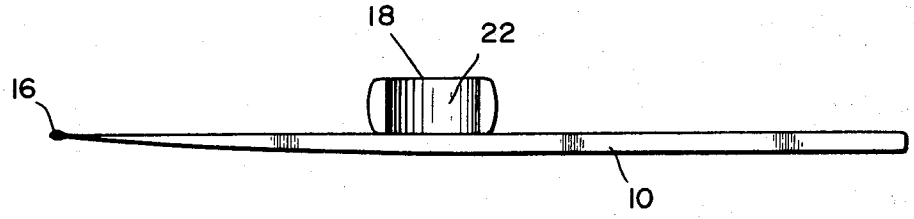


FIG. 2

INVENTOR.
FRANK F. RUBIN
BY
Morse Altman & Oates
ATTORNEYS

GUARDED DORSAL OSTEOTOME WITH STABILIZER

This application is a continuation of my earlier filed application Ser. No. 660,766, filed Aug. 15, 1967 and now abandoned.

This invention relates to a chisel particularly designed for cutting bony tissue. It is important in surgical operations on such tissue that the intended direction of cut be maintained without side-slip or deflection of the cutting end of the instrument. To guard against such tendencies which are apt to be caused by the grain of the bony tissue which is being cut, the corners of the instrument at the cutting end are rounded and dulled, and a stabilizer is formed near the mid point of the instrument. The stabilizer, by being held with the index finger and thumb, prevents the chisel from twisting while it is being directed cephalically (toward the head) during the process of removing the nasal hump (sometimes called the dorsal hump).

For a more complete understanding of the invention, reference may be had to the following description thereof, and to the drawing, of which

FIG. 1 is a plan view of an osteotome embodying the invention; and

FIG. 2 is a side elevation of the same.

The invention may be embodied in a chisel having a handle or shaft portion **10** and terminating in a blade **12** at one end thereof. Blade **12** is formed with a protuberance **16** having a cutting edge **14** at its central portion. In the preferred embodiment of the present invention, protuberance **16** is symmetrical about the longitudinal axis of shaft **10** and cutting edge **14** is transversal to the longitudinal axis of shaft **10**.

To facilitate correct guidance of the instrument when in use, a stabilizer **18** is mounted thereon at an intermediate point thereof to be grasped by the thumb and a finger of one hand of the operator. Stabilizer **18**

facilitates proper steering and inhibits unintentional twisting of the instrument as it is thrust through the bondy tissue. As shown, the stabilizer is an upstanding block having arcuate recesses **20** and **22** in its sides for the thumb and a finger of the operator. This stabilizer not only facilitates the proper steering of the instrument as it is thrust through bony tissue but also provides a convenient purchase for the application of force to push the instrument. The stabilizer may be mounted on any chisel to give the operator better control when using the instrument.

What is claimed is:

1. A device for cutting and shaving bony tissue, said device comprising:

a. an elongated shaft formed with a protuberance at a working end of said device, said shaft having upper, lower and side surfaces, said upper and lower surfaces converging toward said working end, said side surfaces diverging toward said working end, said protuberance being symmetrical about the longitudinal axis of said shaft, said protuberance having a straight cutting edge at a central portion, said cutting edge being transveral to said longitudinal axis, opposite ends of said cutting edge being thickened and rounded; and

b. a stabilizer mounted on said upper surface of said shaft at an intermediate point thereof, said stabilizer being an upstanding block, said upstanding block having opposite sides extending lengthwise of said device and being formed with curved surfaces which are symmetrical about said longitudinal axis and define outwardly facing arcuate recesses, said stabilizer defining a purchase for application of force to push said device and for guiding said device as it is thrust through the bony tissue.

* * * * *