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NERVE EXTRACTING NEEDLE FOR DENTAL PURPOSES OR THE LIKE.

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1,402,229.

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UNITED STATES PATENT OFFICE.

FRIEDRICH HAUPTMEYER, OF ESSEN, GERMANY.

NERVE-EXTRACTING NEEDLE FOR DENTAL PURPOSES OR THE LIKE.

1,402,229.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that Dr. FRIEDRICH HAUPTMEYER, a citizen of Germany, residing at Essen, Germany, has invented certain new and useful Improvements in Nerve-Extracting Needles for Dental Purposes or the like, (for which I have filed application in Germany May 27, 1919,) of which the following is a specification.

10 The invention refers to needles or similar instruments for dental or similar purposes consisting of chromium-nickel-steel alloys instead of ordinary steel. Chromium-nickel-steel alloys particularly withstand the effects of certain acids or similar substances, and this property is particularly characteristic of chromium-nickel-steel alloys containing about 18 to 23 per cent chromium, 10 to 5 per cent nickel, and 0.1 to 0.4 per cent carbon.

20 Particularly in dentistry which uses destructive chemicals such as aqua regia, sulphuric acid, phenyl chloride, formaldehyde and the like, fine points of nerve extracting needles or similar instruments when made of ordinary steel are particularly subject to deterioration and destruction. Precious metals cannot be used generally for this pur-

pose because they lack the necessary strength and hardness. Electroplating of such steel needles with precious metals is not practical on account of the fine points required on these needles.

Furthermore, ordinary steel is not practical for needles of this kind on account of the danger which is incurred through broken off pieces which may remain in the teeth. Owing to the inflammation and abscesses caused by such broken needle portions which are difficult to remove, nerve extracting needles are frequently not used notwithstanding their otherwise desirable characteristics.

On the other hand, when needles made of chromium-nickel-steel alloys of the character described are used, broken off pieces may remain in the body without danger.

The accompanying figure shows a nerve extracting needle consisting of a chromium-nickel-steel alloy of the character specified.

Claim:

A dental needle or broach having a body made up of chromium from 18 to 23 per cent, nickel from 5 to 10 per cent and carbon from .1 to .4 per cent.

Dr. FRIEDRICH HAUPTMEYER.