

PIONEERS AND EMPIRE BUILDERS: No. 112  
FOURTH PERIOD, circa 8000 to 2500 B.C.

# To Produce "Twilight Sleep"

TRADE MARK **HYPOLOID** BRAND  
**SCOPOLAMINE  
HYDROBROMIDE**

In Two Strengths :  
'Hypoloid' Scopolamine  
Hydrobromide, gr. 1/150  
'Hypoloid' Scopolamine  
Hydrobromide, gr. 1/450  
In boxes of 10  
'Tabloid' Hypodermic  
Morphine Hydrochloride,  
gr. 1/4, should be used in  
conjunction with the above.

Prepared from the pure lævo variety of the alkaloid and may be relied upon for uniformity of action.

Issued in sterile solution in hermetically-sealed phials, containing an accurate dose of 0.5 c.c., ready for immediate hypodermic injection.

*For full particulars, see Wellcome's Medical Diary*

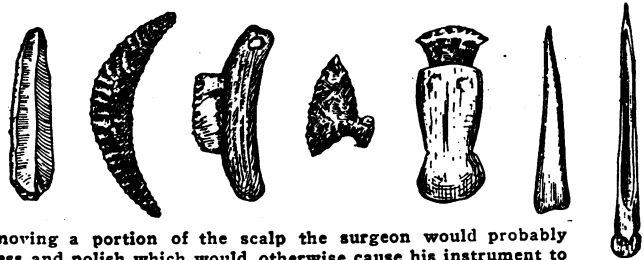


**BURROUGHS WELLCOME & CO., LONDON**  
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN  
SHANGHAI BUENOS AIRES BOMBAY

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London Exhibition Room: 54, Wigmore Street, W.

**TYPICAL EXAMPLES OF THE EARLIEST KNOWN SURGICAL INSTRUMENTS.**—The flint instruments here figured include those which would be employed by the pioneers of trepanning, both by sawing and by scraping. Present-day experiments have demonstrated that with these instruments the former operation can be performed in about three-quarters of an hour, while the latter takes about half the time. The thin and tender skull of an infant would be trepanned in a few minutes—and it is noteworthy that very many of the Neolithic patients were children. After removing a portion of the scalp the surgeon would probably scrape the bare skull in order to destroy the smoothness and polish which would otherwise cause his instrument to slip. Next, with a flint knife or piercer he would outline the shape of the section he intended to remove. Then he would work along this outline with knife and saw, using now the point, now the blade or edge according to the requirements at each step, until he had sawn through all but a thin layer of the skull. A slight pressure at some point in the groove would allow of the introduction of a splint of bone or wood which, used as a lever, would remove the circumscribed portion without damage to the dura mater. The operation by scraping was presently performed by progressive thinning of the skull with a knife or scraper, the operation being completed by a series of light taps upon the innermost lamina which is thus broken up. The natives of New Ireland use obsidian flakes for trepanning. A portion of a trepanned Neolithic skull showing scratches and grooves made by the flint surgical instrument is here reproduced.



CULTURE PHASE: NEOLITHIC.

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