

three or four analytic hours every week for two or three years.

If Dr. Horney's conclusions are substantiated by the observations of other psychoanalysts, they may have an important effect on the practice of psychoanalysis. If self analysis could be used as a supplementary procedure, it would leave the analysts free to treat more patients. This would be particularly valuable in wartime when doctors are scarce and patients plentiful.

One illuminating case of self analysis is reported by Dr. Horney in full detail.

This was a young woman who, after a year of psychoanalysis, continued it by herself during the next two years. By a fairly systematic process of writing down her free associations and examining them later, she managed to free herself from her lifelong habits of submission and dependency, to become a reasonably

happy and self-reliant adult, and to develop a previously inhibited capacity for original, creative writing. This seeming miracle was accomplished by an exceptional combination of courage, honesty and a determination to get well. In other words, "conditions were favorable."

Dr. Horney cites several cases in which "occasional self analysis" was helpful for specific problems. A business man of her acquaintance, for instance, was able to cure himself of superficial headaches. While he had never been analyzed, he was familiar with the psychoanalytic viewpoint and had an honest desire to discover the psychological reasons for his headaches. However, Dr. Horney emphasizes that in most cases attempts at self analysis are fruitless without previous psychoanalytic experience.

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VOLCANOLOGY

Bombing Lava Stream Deflects Flow in Harmless Direction

Hardened Crust of Lava Is Often From Six Inches To Two Feet Thick, But Easy to Break With TNT

BOMBING a lava stream to keep it from destroying a city is more or less like blasting a levee to relieve the pressure of a river in flood, except that a lava river builds its own confining embankments.

Lava of the type that Mauna Loa sent to threaten the city of Hilo early this month rapidly forms a crust on its outer surface as it flows, explained Dr. E. S. Shepherd, Carnegie Institution of Washington volcanologist. It not only builds up side walls but even roofs itself over.

This produces some impossible-appearing results, including the ability of the advancing stream to climb slight rises and to ignore side slopes that would deflect a stream of any normal, unconfined liquid.

These confining walls of hardened lava crust are often thick — from six inches to two feet—but the rock is brittle and readily breached by heavy explosive charges. All that is necessary is to drop a few moderately heavy bombs—say 500-pounders—against the side wall at a point where the break will permit the lava to drain down a slope into an unoccupied valley.

It is even possible, Dr. Shepherd

said, to deflect such a lava flow with a firehose, by directing the stream on one part of the front to cause the more rapid formation of the confining crust there, permitting the lava to move in the desired direction at another point. The trouble is, however, that there is neither water nor firehose in most of the area ordinarily traversed by Mauna Loa's lava flows.

Bombing volcanoes to provoke eruptions in enemy territory, Dr. Shepherd added, is not a very promising tactic. The biggest air bombs would probably have no effect at all if dropped directly into either Japanese or Hawaiian volcanoes, or indeed into any of the volcanoes in the whole Pacific region.

Only one type of volcano might conceivably have its outburst triggered by an outside explosion. That is one in which the lava column rises close to the very rim of the crater, and then hangs there for several days before beginning active eruption. If bombed at just that time, the outbreak might be speeded. Obviously, such an opportunity comes too seldom, and is never timed just the way an attacker might want it.

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Everybody's Flower

ROSES crown the whole round world in June. Roses grow and are high favorites in the cool lands of the North, like Britain and Scandinavia; they thrive even more luxuriantly, and are loved no less, in the warmer lands edging down toward the tropics, like Persia and Spain. Only in Japan are they thrust aside by another flower, the chrysanthemum; and even there the cherry blossom, a near relative of the rose, runs close with second honors.

There seems to be something strongly appealing to a basic human sense of symmetry and rhythm in the crown of five petals that is the basic rose design. This pentamerous pattern repeats itself in all sorts of art designs, from beautifully modeled Chinese bronzes to the great rose windows above the doors of some of Europe's medieval cathedrals. And when Dante wanted a blazing symbol of the striving of innumerable souls toward the throne of God, he conjured up his unforgettable image of the Mystical Rose.

Roses have grown in gardens ever since gardens were first planted. And where gardens are oldest, in the Asiatic lands where civilization had its dim beginnings, roses are most highly cultivated and farthest developed. Most of the rose stocks of our gardens and greenhouses, with their rich array of colors and delicate nuances of shades and tints, their extraordinary development of double petals, are derived from these southern Asiatic species.

This effort toward wide variation in coloring and artificial perfection in form, centered on roses from warm-temperature lands, has given rose lovers their severest problem: lack of hardiness in the finest horticultural varieties. Over wide

stretches of our country, the choicest roses cannot be grown successfully out of doors without the most elaborate kind of protection in winter. And summer drought is often just as unkind to them.

Fortunately, these lands of hard winter do not need to be without their roses. They have wild roses of their own, that are worthy of places in anybody's gar-

den; and there are simpler roses in cultivation, too, that can withstand even a Dakota winter. To many persons, these simpler roses have a stronger esthetic appeal than the richly doubled ones, because their flowers without stamens and carpels being diverted into extra petals, are more natural and normal.

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that place predicted by English astronomer Cripps (not Sir Stafford).

Amateur astronomers may want to look for comet Grigg-Skjellerup, which Kanda reported to be 10th magnitude on May 9. It is moving rapidly through the southeastern part of Gemini in a northeasterly direction. Predicted position is:

June 2. right ascension 8 hours 53 minutes, declination 25 degrees 15 minutes north.

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ASTRONOMY

International Cooperation In Reporting Returning Comet

By CHARLES A. FEDERER, Jr.
Harvard College Observatory

A COMET whose terrestrial history is more significant than its celestial record has returned to our evening skies, bringing with it an example of the results of international coordination among scientists in spite of wartime hates and horrors.

"Pure science knows no international barriers" is a statement made by modern scientists, but often its truth is belied by the serious facts of war.

But the heavens are still free hunting-grounds for all men, and friend and foe alike coordinate their efforts in tracking down its vagabonds, chief of which are the ever-mysterious comets. Latest wanderer into our embroiled part of the solar system is what astronomers prosaically call "periodic comet Grigg-Skjellerup."

According to Dr. Harlow Shapley, director of Harvard College Observatory, the new visitor might well be called the international salesman of the sky, for it represents first New Zealand, then Finland, then England, Belgium, the United States, Sweden, Denmark, and last, but not least, Japan. No two countries figure twice in its history, which begins with its discovery by New Zealander Grigg in 1902.

The latest re-discovery of comet Grigg-Skjellerup has been made by a Japanese astronomer, S. Kanda, our information coming in the form of a cable from Lund, Sweden, where it had been received from Copenhagen, Denmark, which had gotten the news from Japan. (In the past year, Lund has replaced Copenhagen as a clearing house for European and Asiatic information.)

However, Kanda's observation was no news to American astronomers, as the Belgian-American, Dr. George Van Biesbroeck, at the University of Chi-

cago's Yerkes Observatory, had already seen the comet on April 11. Dr. Shapley stated that announcement of this failed to reach Lund, as cablegrams and radiograms cannot go through, and Harvard's regular announcement cards, sent by mail, are apparently still in transit.

Finland enters this comet's history in 1922, when Skjellerup re-discovered it; after that it was seen in 1927 and at five-year intervals. Its return this year was therefore expected, and the position reported by Kanda is almost exactly at

PUBLIC HEALTH

Pellagra, Disease of South, Found in the North

PELLAGRA, dread vitamin-deficiency disease once thought limited to the South, has been found in Northern communities, and probably exists throughout the world. One to two out of a hundred patients admitted to two Ohio hospitals had this illness. This is the conclusion of Dr. William Bennett Bean, Dr. Tom Douglas Spies and Dr. Marion A. Blankenhorn of Cincinnati (*Journal, American Medical Association*, April 4).

The three Ohio physicians found 111 victims of pellagra in Lakeside Hospital, Cleveland, and 128 in Cincinnati Gen-



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