



The Gold Rush

➤ SOME LITTLE TIME ago, there was more or less of a to-do about the announcement of a Canadian mining engineer that he had found measurable quantities of gold in the curious jointed plant known variously as horsetail and scouring-rush. Repeated at second and third and 'steenth hand, the story came to be that the plant always had gold in it. Had that been the case, it would have been just too bad for the horsetails.

However, truth for once caught up with error, and the quaint growths are safe. The whole case is reviewed in the American Fern Journal by Dr. Ralph C. Benedict of the Brooklyn Botanic Garden.

The facts, according to Dr. Benedict, seem to be that at least one species of horsetail has a peculiar affinity for gold, and if it grows on ground where a little gold is present it will take it up in solution and store it in its tissues. When it is recalled that gold is one of the least soluble of all substances, and that the plant eventually comes to contain almost four and one-half ounces of the metal to a ton of horsetail, the efficiency of this biological "concentration plant" becomes apparent.

Prospectors are not interested, however, in horsetail as a source of gold in itself. It is thought of more as an indicator of the presence of gold; for of course if there is no gold in the soil the plant cannot concentrate it. The idea is to try to find out where the gold came from: whether it is in the ground on the spot, increasing in amounts as one digs down, or whether it was washed down in dissolved form from a deposit elsewhere. Then the game is to hunt for the "elsewhere" deposit.

For all of which, Dr. Benedict sug-

gests that we may want to change the name of the plant from scouring rush to "gold rush."

Why horsetail should pick up gold from the soil and store it in its tissues is a bit of a riddle. Apparently no exact experimental studies have been made on the subject, but it is suggested that the property is connected with the very high percentage of silica in the plant—the same stuff that gives it that harsh, glassy "feel" and made it a favorite in olden times for scrubbing table-tops and scouring pots and pans.

Science News Letter, March 6, 1943

INVENTION

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Science News Letter, March 6, 1943

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