ARCHABOLOGY

## **Double Double-Cross**

This modernly flavored bit of political connivance took place some 2500 years ago in Greece. The word "ostracism" comes from the peculiar ballots used.

➤ HERE is the story of a political double double-cross, that happened in a certain town. After you have read it, you may figure out whether it might possibly have been your town.

Three men were contending for recognition as top boss. Let us identify them, for the moment, by nicknames. First there was "Bolo," considered pretty much a left-winger; a man of working-class origin, strong for the labor vote. Opposing him was "Al," an ambitious, up-and-coming young fellow, but rated as reasonably safe by the solid-businessman element. Between them was a veteran officer, "Nicky," expected to catch a considerable ex-GI vote.

An election was coming up, in which all three would figure. The deal was that the one who came out at the bottom of the heap would have to leave town and stay away for ten years.

Al first turned his guns on Nicky. That looked like a signal for Nicky and Bolo to gang up against him. Realizing this in time, and not relishing the idea of having to spend his best ten years out of politics, Al switched, supported Nicky whom he had at first attacked, and so sent Bolo into exile.

All this happened in Athens. Not Athens, Ga., or Athens, Ohio, but Athens, Greece. And for all the modern flavor of the skullduggery it happened nearly 2500 years ago, in 417 B.C., when Hyperbolos the demagog got the short end of an ostracism election in which the other "candidates" were Nikias, a popular general, and Alcibiades, about the smoothest politician that Greece ever produced.

The story is told in the journal, Archaeology (Summer, 1948), by Antony E. Raubitschek, along with some interesting tales of other ostracisms conducted in ancient Athens.

That interesting political device, by which the citizens could pick out one of their number and exile him for ten years, seems to have been the one real chance that they have ever had to indulge the very human impulse to "vote

against" someone, without having to vote in favor of someone else whom they didn't like, either. You simply put on your ballot the name against which you had the biggest gripe, and if enough of your neighbors did the same thing, out he went.

The ten-year sentence of exile was softened by the possibility of a recall by vote of the Athenian Assembly, or town council. And whether he served out his full ten years or was recalled sooner, the loser retained his citizenship and title to his property. Some of Athens' most noted leaders suffered ostracism, and were subsequently recalled to lead the state anew.

Ostracism gets its name from the peculiar ballots used. Voters scratched the names of the "candidate" on bits of broken pottery, which were known as "ostraka." Originally, ostraka were oyster-shells, and the name apparently was transferred to the pottery scraps because of a general resemblance in size and texture.

Science News Letter, May 15, 1948

MEDICINI

#### Hibernation of Germs Affects Malaria Relapses

➤ HIBERNATION plays a part in the time interval between relapses of malaria, Drs. G. Robert Coatney and W. Clark Cooper of the National Institute of Health told the Congress on Tropical Medicine and Malaria meeting in Washington.

The hibernating is done by the malaria germs, or parasites as doctors call them. This hibernation seems to be the reason why there is a long, over-winter period between a first attack of malaria and the first relapse in patients who get malaria in the United States. It may also be the reason for the spring wave of malaria in other temperate-zone regions.

Malaria germs from the tropics, however, such as attacked our fighting forces in the South Pacific, do not seem to hibernate. Relapses come in close succession, as many a veteran knows.

Drs. Coatney and Cooper had a unique chance to compare malaria parasites in the course of the war search for a quinine substitute for malaria treatment. Human volunteers were used in one stage of the studies. By 1944 the doctors had germs of vivax malaria from the blood of a soldier recently returned from New Guinea. They belonged to the Chesson strain of malaria germs. The doctors were able to infect some human volunteers with these germs and infect other



AN OSTRAKON—Sometimes called a potsherd ballot, it was used in the voting that sent into exile one of Athens' foremost citizens. It bears his name, in crudely scratched characters: Aristeides, son of Lysimachos. This could be the very ballot which one grouchy Greek cast because, he said, he was "tired of hearing Aristeides called 'the Just'."

volunteers, living side by side under identical conditions, with germs of the St. Elizabeth vivax malaria strain. These were isolated in the United States.

The St. Elizabeth strain caused a first attack within a few weeks after the volunteers were bitten by infected mosquitoes. But the relapse did not come until six to 12 months later. The Chesson strain caused relapses one right after the other.

The doctors do not think the Chesson strain will adapt to our temperate-zone climate and abandon its tropical habit of developing rapidly in the body.

Science News Letter, May 15, 1948

# **High Blood Pressure Aids**

Adding salt to the food and injecting an anti-blood clotting chemical in patients with this kind of disease appears to bring improvement.

➤ MORE salt in the diet and an antiblood clotting chemical are two new weapons for fighting high blood pressure. They were discussed at the meeting of the American Foundation for High Blood Pressure in Cleveland.

More salt in their food is the pleasant prospect for patients with the kind of high blood pressure doctors call malignant hypertension and kidney disease. The present trend of restricting salt rigidly in such cases has gone too far, in the opinion of Dr. Francis D. Murphy of Marquette University School of Medicine. He reported that many patients are doing better when salt is added to their food, rather than restricted.

The anti-clotting chemical, heparin, is being tried cautiously in women who develop high blood pressure during pregnancy. This is the forerunner of dangerous convulsions. The ancient Greeks seeing a pregnant woman seized with a sudden fit thought it was due to a lightning thrust from heaven and gave it the name of eclampsia, meaning, a bolt from the blue."

The condition remains a mystery, although modern doctors can detect the early stage of the disease by watching the pregnant woman's blood pressure. When it goes up, the patient is usually promptly put to bed. What to do next has remained a problem because the cause of the condition is not known.

It is known, however, that the blood of women with this condition clots more quickly. The red blood cells tend to stick together and the small blood spaces in the liver and placenta seem to be blocked by clotting fibers.

This has led to the trial of the anticlotting chemical, heparin. When this is injected for several days into the veins of women in the pre-eclampsia stage, many of the serious symptoms seem to improve, Dr. E. W. Page of the

University of California Medical School reported.

The improvement lasts as long as the drug is given. But the drug seldom cures the condition completely for the blood pressure often remains high.

The new treatment, Dr. Page pointed out, has certain drawbacks. It is expensive. The patient requires constant attention day and night. And it is dangerous, although no harmful effects have been noted so far.

Dr. Page and other scientists consider it merely a step toward development of a simpler, less costly treatment which will produce the same good results.

Science News Letter, May 15, 1948

#### Color of Skin Doesn't Affect Color Vision

THE color of a person's skin has nothing to do with the acuteness of his color vision, it is indicated by a study made by Dr. R. W. Pickford, of the psychology department of the University at Glasgow, Scotland. His race may have.

Tests on 571 men and women normally sensitive to color and 138 colorblind persons, reported in the scientific journal, Nature (May 1), show that red and green are mixed up by dark people just as much as by the fair but no more often.

These results are in conflict with the earlier finding that red-green blindness is more common in the south and west of the British Isles where the original dark-skinned inhabitants were pushed back in the days when the blond Nordics invaded. Earlier studies had also shown that red-green blindness is less common among American Indians and American Negroes than among American whites.

It may be racial difference rather than the difference in color that is related to differences in color vision, Dr. Pickford

To check on this, he tested 20 members of dark-skinned races. Still he found no difference in ability to see and distinguish red and green. They are, however, less sensitive to blue and yellow.

Nine of the group are Dravidians, a people from India. These people were found to be less sensitive to yellow and blue than the Europeans tested. Six West Africans were even less sensitive than the Dravidians.

Negroes and American Indians, it seems, have better red-green color vision than Europeans, but Dravidians and Negroes are more often weak in vision of yellow and blue.

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