group is 30 times as high as that among the citizens of the democracy.

Citizens in an autocracy cannot work together. Even when cooperative work groups were set up by the "dictator," they soon would break down. In the democracy, cooperation developed spontaneously.

More individual desire to dominate is evident in the autocracy, more feeling of "I-ness," more personal feeling.

Constructiveness is higher in the democracy; in the autocracy it falls down quickly when the "dictator" is not present.

In the autocracy, the hostility of the group is likely to center on a scapegoat who is treated so badly by the whole group ganged together that he finally becomes a "refugee" from the group. After his departure, another member becomes the scapegoat.

Contrary to what might be guessed, an anarchy was found to be nearer to the autocracy than to the democracy in effect on the citizens. The resemblance was particularly great in regard to the hostility between members.

"In autocracy the tension seems to be due to lack of freedom," Dr. Lewin interpreted. "In laissez faire, tension seems to be due to the anarchic structure of the situation which prevents long range planning and lacks meaningful time perspective both for the group and the individual."

Science News Letter, May 28, 1938

ARCHAEOLOGY

Archaeologists Dig Up King Solomon's Seaport

New Finds Indicate That Sheba's Queen Visited King For Political Reasons, Not Because of Romance

THAT popular idea about the Queen of Sheba visiting King Solomon to enjoy his intellectual conversation may be all wrong. Archaeologists have unearthed King Solomon's seaport, where he built his ships. They suspect Sheba's Queen came up to Jerusalem in alarm over the growing power and trade expansion of the Israelite empire. It was a Hitler-visits-Mussolini affair, back in the tenth century B. C.

Excavation of Solomon's port, the Bible town of Ezion-geber on the shores of the Red Sea at Tell el-Kheleifeh, is reported by Dr. Nelson Glueck, director of the American School of Oriental Research in Jerusalem. The president of the American Schools of Oriental Research, Prof. Millar Burrows, of Yale, announcing the discoveries today, said that the lost site was re-discovered at the northern end of the Gulf of Aqaba.

The mystery of finding the ruins half a mile inland is believed solved by the fact that north winds continually blow sand from the Arabah, and the seashore is widened slowly year by year.

When King Solomon built his fleet there, his vessels could trade directly with southern Arabia and indirectly with India. Prof. Burrows points out that "it is probable that the visit of the Queen of Sheba, which is narrated immediately after the construction of the merchant fleet, was inspired in part by the fear that Solomon's marine enterprise would diminish her revenues from the trade which passed by caravan through her territory."

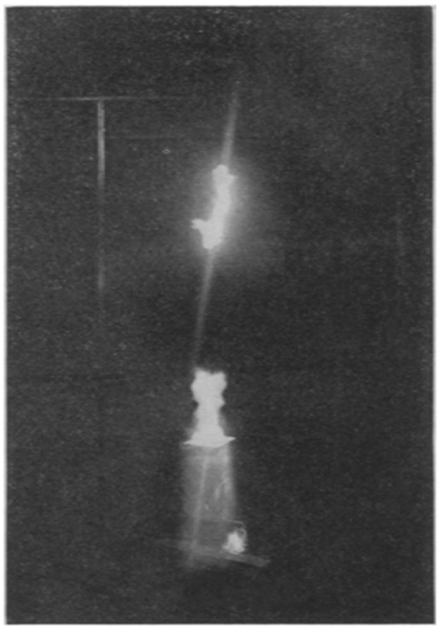
Why the wise Bible king chose a port exposed to north wind blasts is now understood by the archaeologists. Excavation reveals a big copper smelting and refining plant well preserved, and the ancient workers are believed to have used the constant draft as an aid in working their furnaces. The strong draft still blows through the flue holes in the rooms.

The seaport flourished from the tenth to the eighth century B. C., according to finds unearthed in the ruins. The inhabitants worked at ship building, copper smelting, fishing, and manufacture of such copper implements as spear heads and nails.

So important are Dr. Glueck's discoveries considered that another campaign is planned for next year. The expedition has been supported by a grant from the American Philosophical Society.

Science News Letter, May 28, 1938

A Czechoslovakian anthropologist has made a study of types of eyebrows and eyelashes.



MAN-MADE LIGHTNING

This is the half-million-volt Westinghouse surge generator in operation at the Franklin Institute. The artificial lightning bolt shattered a four-inch billet of wood so quickly that only the top could be pictured; the rest was instantaneously splintered and knocked out of camera range.

ENGINEERING

Half Million Volt Strokes Of Man-Made Lightning

A HALF MILLION volts of artificial lightning crash into tiny model houses to show how electrical science protects real homes against the menace of natural lightning strokes in a demonstration which is a regular Franklin Institute exhibit just opened with Westinghouse cooperation.

The man-made lightning, in one test, strikes a section of tree trunk, scatters it into kindling and shows how a tree or pole is split by real lightning.

In another test stands a small house, electrically illuminated. Near the house, on a pole, is a transformer as in real life. The arrival of the lightning stroke creates a high-voltage arc at the transformer and the lights in the house go out. In contrast, when a lightning arrester is placed across the transformer, the lights in the house only blink when a 500,000-volt bolt hits the electric wiring.

Science News Letter, May 28, 1938

When the element selenium is heated to 70 degrees Centigrade it is found to have elastic properties.