

was puzzled to come out with the total eleven although he knew perfectly well that he had only ten fingers and thumbs. Again and again he tried. Counting gave him eleven; knowledge gave him only ten. Counting by two's he got ten; counting by one's he got eleven. It was soon evident to the examiner, but not

to the subject that he had lost his knowledge of the number three—each time in counting he skipped it.

Restoration under hypnosis of the concept of three automatically restored his color vision for red. The number three to this man meant red.

Science News Letter, April 1, 1939

ARCHAEOLOGY

Fate of King Solomon's Gold May Be Revealed in Find

FATE of King Solomon's Temple treasures may be revealed to the modern world, as archaeologists gaze wonderingly at the golden sarcophagus and inner silver coffin of Pharaoh Sheshonk, found in the Nile Delta at Tanis.

Perhaps millions of dollars worth of gold and silver melted to form these massive cases include cups and bowls from Solomon's Temple and palace in Jerusalem.

Ascribing the royal tomb to Pharaoh Sheshonk dates it as belonging to the twenty-third dynasty, and after King Solomon's death. The family alliance which Solomon made with Egypt, when he married a Pharaoh's daughter, wrought no permanent friendship with Egypt. Pharaoh Sheshonk the First—called Shishak in the Bible—invaded Palestine and sacked Solomon's Temple and Palace in Jerusalem, carrying off rich hauls of gold and silver.

What happened to this historic property in Egypt has often been wondered. Pharaoh Osarkon the first, who succeeded Sheshonk, made conspicuously generous gifts of gold and silver bowls and cups to priests in Egyptian temples.

His lists of religious giving include references to weight, which might imply fortunes in silver and gold. It is not too fanciful to suppose that some of the Hebrew art objects and Temple furnishings were converted into spectacular coffins for conqueror Sheshonk or one of the three later kings of this name.

That a rare turn of fate preserved the tomb of Sheshonk undisturbed is shown by the fact that Prof. Pierre Montet of the University of Strasbourg encountered only empty tombs until he met a solid wall, and discovered this tomb hidden back of it.

Egypt in the twelfth and thirteenth centuries B. C. had drifted into serious economic depression, when looting royal tombs at Thebes became a customary way for desperate natives to make a living. Harassed Pharaohs rescued royal mummies from plundered tombs, and moved them from one place to another, but found no rest for the Pharaohs until they dug a pit back of a temple in Thebes cemetery. There an illustrious assembly of royal Egyptians was found by Maspero in 1881, and these mummies now repose in Cairo Museum.

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Bureau of Dairy Industry will report the technical details of their discovery at the coming meeting of the American Chemical Society in Baltimore, early in April.

The cream from cow's milk is skimmed off to make butter and the casein is removed to make cheese or casein molding compounds. Then the virtually worthless whey is freed from its lactose, or milk sugar content. By fermenting the lactose, lactic acid is obtained and out of the latter comes the transparent, springy and tough polymethylacrylate.

The new discovery will be significant for Italy where the casein of milk is now being used on a large scale to produce lanital—a synthetic wool substitute used in army uniforms, blankets and general clothing. The Italians are at present neutralizing the whey and feeding it to swine, but they can just as easily turn the lactose into lactic acid and wind up with polymethylacrylate that will turn their lanital clothing into poison gas-resistant clothing.

Production of polymethylacrylate from lactic acid is just as cheap, report the U. S. chemists, as is its preparation from ethylene and alcohol by the customary cyanhydrin process. Polymethylacrylate products are in demand for the preparation of lacquers, varnishes, inks, cements and impregnating compounds. The established market means a wider outlet for dairy products.

While polymethylacrylate alone cannot be turned into hard, transparent resins it can be combined with the related organic glass and by polymerization yield a transparent resin superior to its component parts.

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Poison ivy and ragweed are unknown in Yellowstone National Park.

CHEMISTRY

Whey Product Makes Cloth Resistant to Poison Gas

OUT of the whey of cow's milk—now virtually a waste product of the dairy industry—government scientists are producing a new chemical that has the power to prevent the penetration of poisonous gases through clothing.

The chemical, looking and feeling quite like a transparent art-gum type of

eraser, is polymethylacrylate. While related chemically to the transparent resins known as the organic "glasses" it cannot, of itself, be made into a hard material. Mainly its greatest use comes from the impregnation of fabrics so that they are resistant to oil, water and gases.

Dr. Lee T. Smith and H. V. Claborn of the research laboratories at the U. S.

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