

of the Palestine Institute of the Tell en-Nasbeh expedition.

In his laboratory in Berkeley, California, Dr. Bade has been studying pottery jars and fragments which he and his assistants have accumulated in four expeditions to Tell en-Nasbeh, believed to be the site of the Bible city of Mizpah. Mizpah is famous as a city where Samuel judged the forces of the Israelites and where Saul was chosen king.

Debris in the ancient town lies in layers, buried by successive builders who filled in depressions, leveled off ruins, and built their new streets and houses over remains of the previous town. Because this filling in process was often uneven, archaeologists have trouble, Dr. Bade explains, in tracing the same layer of occupation over a 12-acre site, such as Mizpah covers.

Fingerprints have helped solve this problem at Mizpah. Clay jars found in different depths of the mound have proved to be from the hand of the same potter, thus showing that the jars and objects associated with them belonged to a single period of the town's history.

On large, two-handled jars, the potters of Mizpah stamped trade-marks—their own fingerprints, Dr. Bade discovered. This was done apparently to enable them to recognize their own craft-work.

"It is in rare cases possible to make out the lines of the sweat ducts," he explains, and in that case they can be identified by making models of the deep impressions and fitting them to similar prints in other jars.

"I do not for a moment believe that the potters were aware that their fingerprints had the distinctiveness which is

now recognized in the fingerprint system. It is the place and arrangement of the impressions which served as distinguishing marks to them."

In his study of fingerprints, Dr. Bade was assisted by August Vollmer, professor of police administration at the University of California and former Berkeley police chief.

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SURGERY

Sight Restored by Corneas Grafted on Both Eyes

THE ONLY person in the world who has had new corneas successfully grafted onto both eyes attended the meeting of the American College of Surgeons as an unofficial exhibit of British surgical skill. She is Miss Daphne Muir, English novelist, who lost her sight when both corneas were injured in an accident some years ago.

The cornea is not the eye lens, but is a transparent tissue in front of the lens corresponding to the front lens of the camera. Numerous cases have been reported of successful grafting of a new cornea onto one eye but this is said to

be the first successful case of double cornea transplant.

The operation was performed by Dr. Tudor Thomas of Cardiff and London. Dr. Thomas was not present at the meeting and Miss Muir was not on the official program. However, she was there on a visit in another English surgeon's party and consented to be the subject of a demonstration for American doctors specially interested in surgery of the eye.

Miss Muir's vision is not perfect but she can read headlines in newspapers, can read her own correspondence, and can safely go about the familiar streets of her home town and attend to her shopping. The first object shown to her after the operation was the title on the cover of her just-published novel which was, appropriately enough, "Very Heaven."

New Pressure Technic

The new corneas, taken from eyes which had to be removed from patients suffering from other conditions, were attached by a new technic for this operation. Instead of stitching the new corneas directly to the underlying tissue on Miss Muir's eyes, Dr. Thomas held them in place with two strands of surgical silk applied something like a cross-stitch in embroidery. After carefully removing the injured cornea from Miss Muir's eye, he placed four stitches in diagonally opposite pairs, the silk between each pair crossing to form a large X. The new, transparent cornea was slipped under and the ends of the X or cross-stitch were drawn tight and this held the new tissue in place. The method is called the pressure technic of grafting.

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FINGERPRINTS 2000 YEARS OLD

The long arm of archaeological science has reached back 2,000 years and more to identify Bible potters who left fingerprints in their clay wares. Dr. Bade is shown examining pottery which he unearthed at ruins of Mizpah. The prints shown are of the finger of the same person impressed on lamps in a tomb at Mizpah dating from about the beginning of the Christian era.