ing the type of treatment best suited to the case."

As to the cause of cancer, science still remains in the dark, he said. The best answer is simply that it is unknown, although a next best answer is that it is in some way associated with chronic irritation. A jagged tooth, for example, may produce chronic inflammation and a cancerous ulceration. Pipe irritation may bring cancer of the lip to an inveterate smoker. Perhaps some similar reason explains why sea-faring men and farmers are more prone to develop skin cancers than indoor workers. Likewise, chimney-sweepers used to develop skin-cancers from constant irritation of the skin which may become cancerous.

As to what part inheritance may play in human susceptibility to cancer, science is also pretty much in the dark, Dr. Salter admitted.

"Although it is true that mice can be bred, brother to sister, so that eventually all the animals of that strain die of cancer, human beings are such mongrels (from the mouse's point of view) that there is no very definite inheritable factor so far as individual patients are concerned. Indeed, individuals vary so much one from another, and their tumors vary so remarkably, that scientists are almost completely dependent upon animals for the detailed study of cancer and its peculiarities.

"By inoculating animals (chiefly pedigreed mice and rats) with tumors it is possible to grow many cancers of a single type and thus make many detailed observations on the same kind of tissue. Only by this method can uniformly reliable experimental results be obtained. In this fashion it has been possible to show that cancer tissue is chemically different from other, normal tissues. It has even been found possible to produce artificially an immunity to cancer in laboratory animals under suitable conditions," he declared.

While there is no evidence that human cancer is "contagious," he continued, it has been possible to extract in the laboratory from growths in animals a juice or filterable virus, which produces a similar growth on injection into another animal. Several such extracts are known, each capable of producing a characteristic tumor in the appropriate species of animal. In recent years, he added, chemically pure substances have been made which also produce cancer on injection, but scientists are still trying to decide if there is any relation between these substances and cancer in human beings.

Concerning the "cure" of cancer, Dr. Salter said that many human cases are cured by surgical means or radium or X-ray treatment, with the visible cancers in general being more amenable to treatment. Likewise the less malignant cancers offer more hope of recovery than the more malignant ones.

Science News Letter, March 13, 1937

ON FRIENDLY TERMS

PALEONTOLOGY

225,000,000-Year-Old Bones Of Texas Reptile at Harvard

A COMPLETE fossil specimen of a long-spined Dimetrodon, one of the earliest of reptiles and apparently the commonest animal on earth about 225 million years ago, has recently been brought to Harvard University by Robert Witter of the Museum of Comparative Zoology.

It was found in the "red beds" of northwestern Texas, which have previously yielded numerous skeletons of the early Permian period, of which the Dimetrodon was characteristic.

Most spectacular feature of the eight-foot animal is a series of long, bony spines extending two feet upward from its back. There is evidence that in life these spines were connected by a web of skin to form a sort of sail.

The function of this sail, if any, is still a scientific puzzle. It was at one time thought to be used in frightening Dimetrodon's adversaries but general agreement that Dimetrodon was pretty much master of the earth in his day dispelled this guess.

The theory has also been advanced that it was used in swimming, either as a rudder or a sail, but the animal was primarily a land-dweller, so this idea has also been abandoned. Even if it had been usable as a sail the animal would probably have been too stupid to get any benefit from it, one scientist has pointed out, for its nearly foot-long skull encased a brain only about the size of a man's little finger.

Science News Letter, March 13, 1937

HERPETOLOGY

Snake Accepts Human Aid In Shedding His Skin

See Front Cover

ST. PATRICK himself could not have claimed less concern about serpents than Frank Garvin, S.J., of the Fordham University science faculty. If anything, matters would seem to have improved considerably since the days of Patrician legend; for here neither snake nor man had any fear for the other. The serpent, a big, husky gopher snake, was starting the difficult process of shedding his skin when Mr. Garvin proffered aid. The snake seemed to appreciate this human assistance in moulting, and submitted to handling without a sign of resentment. The discarded skin is shown on the front cover of this week's SCIENCE NEWS LETTER.

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The principal city of the Virgin Islands is no longer St. Thomas, but Charlotte Amalie, which is the old Danish name, revived by the people.