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Pete Miller, glass inspector, is pleased with that chunk of precious optical glass. He knows this is an optical war. He knows that accurate gunfire control depends upon optical glass... flawless and crystal-clear.

But Pete Miller is not thinking of his skill as a glassmaker at Bausch & Lomb. In that glass he sees his friends at gunfire-control stations on battle cruisers, in the turrets of tanks roaring down on an enemy position, or making aerial photographs behind enemy lines. And always he sees them peering into the sights of a Bausch & Lomb optical instrument.

The glass Pete Miller holds was made to a special formula. It will be ground and polished to become part of the prisms for an Anti-Aircraft height finder. As fighting Americans dial this instrument into focus, guns automatically will be brought to bear on enemy planes with deadly accuracy.

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ENDOCRINE CONTROL OF PROSTATIC CANCER

By Dr. CHARLES HUGGINS
THE DEPARTMENT OF SURGERY, THE UNIVERSITY OF CHICAGO

There is a high incidence of abnormal growth processes—of tumors, in the prostate gland of certain species in senescence. These species are man, the dog and the lion. For technical reasons, observations can be carried out with greater facility on the first two types than on the king of the beasts.

The most common neoplasia involving the prostate gland are benign nodular hypertrophy and carcinoma. The benign hypertrophy has been found to involve the prostate gland in 45 per cent. of men over forty years in otherwise unselected autopsy material. Cancer of the prostate occurs in at least 9 to 17 per cent. of men over fifty years; while many of these tumors are microscopic in size and, remaining latent, seldom are factors in morbidity or mortality, others invade and spread and become the cause of death of about 5 per cent. of men older than fifty years in the United States. Plainly, neoplastic processes are usually present in the human prostate gland after the fifth decade, while a normal prostate is less common in old white men. Barringer, an eminent student of prostatic cancer, recently stated: ‘The control of prostatic carcinoma presents one of the most difficult problems in the field of cancer. Many urologists believe seriously that its control is impossible.’

1 Address delivered on the occasion of the first award of the Charles L. Mayer Prize administered by the National Science Fund of the National Academy of Sciences, May 19, 1943.

2 This investigation was aided by a grant from the Committee for Research in Problems of Sex, the National Research Council.