boosters. He worked out the problem in a matter of hours and it replaces a slow hand method.

Engineers converted an old standard arbor press into an air-operated machine to stake screws in the shell boosters. It is shown on the front cover of this week's Science News Letter. It requires so much less strength to operate than does a manual press that a girl who has been making loose-leaf notebook binders now has also been "converted" to run the new machine.

Science News Letter, February 28, 1942

PUBLIC HEALTH

## Hollywood-Produced Movie Aids in Fight on Syphilis

HOLLYWOOD-produced motion picture that pulls no punches but shows men exactly how to "play safe" and what to use to escape syphilis is the latest shot fired by the U. S. Public Health Service in its all-out war on syphilis.

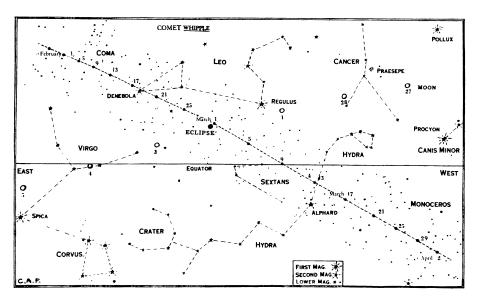
The film, Know For Sure, directed by Lewis Milestone under the supervision of Darryl Zanuck, was produced by the Research Council of the Academy of Motion Picture Arts and Sciences for the federal health service. It will be shown only to men's groups in clubs, factories, colleges and possibly Army training camps.

It tells about Tony whose first son was born dead, about Jerry and his college friends out to celebrate a football triumph, about the man who thought, mistakenly, he could get rid of syphilis by rubbing some salve on a sore, instead of going to a reputable physician for the sure, if slow, treatment that really cures syphilis when started in time.

Details of that treatment and of methods for diagnosing syphilis in all its many masquerades as heart trouble, nervous and mental disease, skin rashes, eye trouble and shortness of breath, make up a longer film, produced by the U. S. Public Health Service itself in color and sound, for doctors and medical students.

This film is designed especially for the general practitioner who has never "bothered with syphilis" before but who, because of our war-caused shortage of physicians, will be drawn into the fight against this disease. The 45-minute film, which can be divided into three parts, condenses the experiences of six months in a syphilis clinic.

Science News Letter, February 28, 1942



ASTRONOMY

## Whipple's Comet Brightest At Middle of March

## Unless It Becomes Unexpectedly Brighter, However, It Will Still Be Invisible Without Optical Aid

HIPPLE'S comet will reach its maximum speed and maximum brightness March 10 to 18. Unless it becomes unexpectedly brighter, it will still be invisible without optical aid, for the predicted magnitude is 7.2, well below the minimum of 6 for unaided vision.

The comet will then be near Alphard, the orange star in the heart of Hydra. From then on, it will slacken its pace and grow dimmer, as it recedes from our neighborhood, probably forever.

The original announcement of comet 1942a, as it is called, was made by Dr. Fred L. Whipple of Harvard Observatory on Feb. 3, but the war delayed news of this discovery reaching Europe.

The comet was independently discovered, Feb. 11, by the Italian astronomer, A. Fresa of Pino Torinese, Italy. The Italian report was sent to Copenhagen, whence it was sent to Prof. Knut Lundmark of Lund, Sweden, who radioed it to Harvard College Observatory

Whipple's comet and the moon will cross paths just about the same time the moon enters the earth's shadow for the total lunar eclipse of March 2. The monthly full moon occurs at this time,

so for a few days before and after that date the comet will be difficult to find because of moonlight scattered all over the sky. However, during the eclipse, the comet should be visible, with powerful binoculars or small telescopes, about 2½ degrees west of the moon.

The chart on this page, drawn by C. A. Federer, Jr., of Harvard College Observatory, shows the path of the comet as predicted by an ephemeris computed by R. N. Thomas, also of Harvard Observatory. Note that the comet appears to move faster during the first part of March, and then begins to slow up once more. Identification of the comet can be made by its motion in an hour or less—this is important because it passes through a part of the sky rich in exterior galaxies, which appear as faint nebulae—diffuse in outline, just as is the comet.

Only near the comet's path are faint stars shown, in order to avoid confusion. However, at its brightest, comet Whipple will still be fainter than any star shown on this chart, but its position can be ascertained by reference to them. The chart shows dashed lines joining the principal stars in the most important constellations; also, the names of the principal