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.

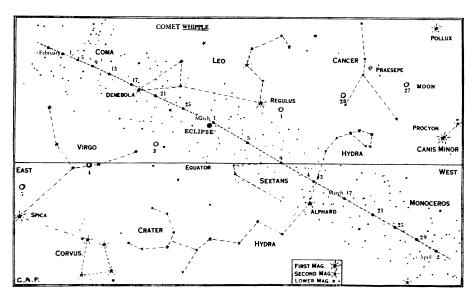
The film, Know For Sure, directed by Lewis Milestone under the supervision of Darryl Zanuck, was produced by the Research Council of the Academy of Motion Picture Arts and Sciences for the federal health service. It will be shown only to men's groups in clubs, factories, colleges and possibly Army training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

stars in the field. On March 15, the comet will be near Alphard, the orange star in the heart of Hydra.

The positions of the moon from February 27 to March 5, at 8:00 p.m., Eastern War Time, are shown, that on March 2 being shown as a dark disk, representing the eclipse. The comet positions are shown for 8:00 p.m., Eastern War Time, also. The corresponding magnitudes, based on the "fourth power" law, are predicted as follows: March 2, 7.5; March 10, 7.2; March 18, 7.2; March 26, 7.4. It is not possible to predict sudden changes in the brightness and appearance of a comet. These may or may not occur, and the brightness may increase more rapidly and to a greater

maximum than listed above. Binoculars of good light-gathering power are needed to pick up its faint light.

The following positions of the comet at 8 p.m. EWT, as computed by Mr. Thomas, will help amateur astronomers locate it: March 1, right ascension, 10 hr. 43 min., declination plus 8 degrees 7 minutes. March 13, right ascension, 9 hr. 21 min., declination minus 3 degrees 19 minutes.

Science News Letter, February 28, 1942

The forked tongue of reptiles is probably one of the most wonderful tactile organs in existence, as it feels many vibrations in the atmosphere which are non-existent to the sense of touch of humans.

PSYCHIATRY

Democracy Threatened By Lack of Neighborliness

Feeling of People Divorced From Social Life That They "Don't Count" Seen as Undermining Morale

ACK of neighborliness in cities, the custom of city people living anonymous lives of their own divorced from the general social life, the feeling of millions of people that "there is no place for them—that they do not 'count,'" threaten the foundations of democracy, Dr. Saul D. Alinsky, of Chicago, told members of the American Orthopsychiatric Association meeting in Detroit.

Dr. Alinsky is the sociologist who helped transform Chicago's notorious "Back-of-the-Yards" district into a genuinely democratic community.

Morale, in his opinion, can only come when the battered word "democracy" begins to mean something to the mass of our people. Not a word that means special privilege to a few, not just a system of voting, not an eagle or a man in a star-spangled top hat. Morale will only come when the rank and file of people can get together and work together, as they used to in small towns.

That this can be done even in huge industrial cities was demonstrated first by the almost miraculous success of the Back-of-the-Yards Neighborhood Council in Chicago, and more recently by Armourdale Community Council in Kansas City, and the South St. Paul Community Council.

Chicago's Back-of-the-Yards, branded

the "Jungle" in Upton Sinclair's famous novel, began its transformation less than two years ago when Dr. Alinsky secured the endorsement of Bishop Bernard J. Sheil and the CIO to set up a Neighborhood Council. The results have amazed sociologists, criminologists, church and welfare workers, and should provide a silencing answer to those who say "democracy won't work."

CIO leaders joined hands with the Chamber of Commerce and the AFL, Catholics, Protestants and Jews worked together under the leadership of Bishop Sheil and Dr. Alinsky to transform Chicago's crime-infested stockyard district into a working community of all the people.

Business men, as well as Church and labor leaders, saw that unemployment, poor housing, inadequate relief with its alarming rate of infant mortality, were their own problems. They cooperated with the Neighborhood Council in providing free meals to undernourished children, building a recreation center five blocks square, setting up the Infant-Welfare Station which promptly cut the infant death rate from ten in every 100 to four out of 605.

Following the astonishing success of the Chicago program, a national Foundation, "Industrial Areas, Inc." was set up to apply the same principles to Kansas City and St. Paul.

Science News Letter, February 28, 1942

Stutterers' Parents Nervous

STUDY of 15 child stutterers showed a neurotic family background in the majority of the cases, Dr. J. Louise Despert, of the New York Hospital and Cornell University Medical College, reported.

Nervous mothers who are always worrying about whether the baby or small child eats enough are likely to have nervous children who stutter. These stuttering children frequently have other neurotic traits.

"This is of considerable importance," Dr. Despert stated, "if one considers that the White House Conference of 1930 gave 1,300,000 as the number of stutterers in the United States and also that the majority of these cases are being treated by means of speech techniques which involve only the speaking organs and functions."

The stuttering results, Dr. Despert believes, from neurotic attention being focused on the mouth, usually with regard to the feeding situation.

She pointed out that children are learning to talk at about the same time they are learning to eat solid food and to feed themselves. They use the same structures to take in food and to form and pour out words. If mother frightens them while they are trying to take in food, they are likely to be frightened also when trying to form and pour out words, and in consequence stutter and have difficulty in talking. The children themselves sometimes give the clue to this when they tell of their difficulty in bringing out words.

Striking example of how the mother's attitude about food affected the child's speech was the case of the fussy, nervous mother who "tried various devices to startle the child and 'throw food' in his mouth unexpectedly because she feared he would die if he didn't eat."

At the age of eight and one-half years, this boy is still taking six meals a day, five of which are liquid, as well as stuttering when he tries to talk.

Treatment of these children consisted of general psychiatric treatment, with chewing-speaking games for the younger children or chewing-speaking exercises for the older children, in a few cases.

In six cases there was some speech improvement and also general improvement. In four cases there was an im-