

## Do You Know?

Good *lipstick*, because often in close touch with food, is made to the same standards of purity.

*Glutamic acid*, used in food-flavoring and in medicines, is a by-product of beet-sugar manufacturing.

*Automobiles* should be driven slowly in cold weather until the engine is heated to normal operating temperature.

Approximately half the *gas* used in homes and other places in a Pennsylvania coke-making town is by-product gas from local coke ovens.

*Grasshopper* and cricket eggs are laid during late summer and remain in the soil until spring when they hatch and the insects emerge.

Although Australia produces nearly 2,500,000 pounds of *hops* each year, it does not grow enough to meet the needs of its domestic breweries.

A Salvadorian government agency is planning to mount some of its employees; it has asked for bids on 50 American *bicycles*.

One kind of horse is a well-known animal, but in a steel mill a *horse* is a chunk of iron which solidifies in the bottom of a blast furnace.

An early *match* was made with wood sticks coated with a mixture of potassium chlorate and sugar and tipped with sulfur; it was ignited by sticking it into shredded asbestos impregnated with concentrated sulfuric acid.

**MAST...specialist in SPECIAL MACHINES**

Increases Production  
Reduces Labor Costs

Example

Send for monthly news letter

**MAST DEVELOPMENT COMPANY**  
Davenport 2 Iowa

### MEDICINE

## Vaccine Hits Women More

► **INFLUENZA VACCINE** produces a more severe reaction in women than in men, the 76th annual meeting of the American Public Health Association was told in Boston.

Absenteeism among inoculated women was four times higher than in men, a study of 4,217 workers at the Prudential Insurance Co., Newark, N. J., revealed. Dr. Joseph F. Sadusk of the Research and Development Board, National Military Establishment, Washington, D. C., directed the study with the assistance of Prudential's researchers, Preston C. Bassett and John S. Meddaugh.

"These reactions," Dr. Sadusk points out, "should not prove a deterrent to vaccination of industrial populations since they are mild and the degree of absenteeism is low."

Infants and children can be protected from the ill effects following influenza vaccine injections if they are inoculated with small amounts of vaccine over short intervals of time, another research team reported to the meeting.

"Reactions to influenza virus vaccine administered to infants and children are due in most instances to the amount of virus in the vaccine," they discovered in their study made at the Sarah Fisher Home, Farmington, Mich. The tests were made on 93 children whose average age was 3.2 years, according to Dr. J. J. Quilligan, Jr., Dr. Thomas Francis, Jr., and Elva Minuse, of the University of Michigan.

A new strain of virus is claimed to be responsible for California's two influenza epidemics during the past two years by Dr. George Meiklejohn, of the State's Viral and Rickettsial Disease Laboratory, Department of Health in Berkeley.

He said the population had little resistance and vaccines had little effect on this strain which showed a sharp difference from Type A influenza strains isolated in 1943 and in earlier years.

Influenza virus was found in the throats of a group of boys more than a month before an epidemic broke out and during the epidemic. During the 32 days they harbored the flu virus they showed no symptoms of the disease, Dr. R. M. Taylor, director of the International Health Division Laboratories of the Rockefeller Foundation, pointed out.

Some 800 boys between 17 and 21 years were subjects of the survey made in a state vocational school. Subsequently there were 32 cases of flu.

No significant difference in the attack rate of the disease was noted among those who were inoculated with either commercial A or B type mixed vaccine and the unvaccinated, Dr. Taylor said.

Data on an Army post which was vaccinated against flu virus with two vaccines, one incorporating a new strain, were pre-

sented to the meeting by Dr. James E. Salk of the University of Pittsburgh School of Medicine, and Capt. Philip C. Suriano, M. C., Fort Dix, N. J.

Fewer individuals were admitted to the hospital for respiratory disease from the group given the new vaccine, they found.

Science News Letter, November 20, 1948

### PHYSICS

## Nitrous Oxide May Be In Whole World's Atmosphere

► **NITROUS OXIDE**, familiarly called "laughing gas," is probably present throughout the whole world's atmosphere. At least scientists have just learned that there's about as much of it in the atmosphere above England as there is above the United States.

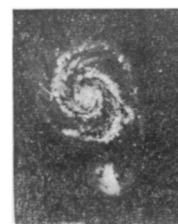
Existence of the gas nitrous oxide in the earth's atmosphere in sufficient quantity to record itself on spectrum photographs of the sun's rays passing through the earth's atmosphere was established several years ago by Dr. Arthur Adel of the Randall Laboratory of Physics, University of Michigan. Now J. H. Shaw, Dr. G. B. B. M. Sutherland and T. W. Wormell, all of the Solar Physics Observatory in Cambridge, England, have shown that about as much exists in the atmosphere above that observatory as was found in America.

Just how high above the earth's surface the majority of this gas is concentrated has not yet been determined. If most of it is in the upper atmosphere, this layer may be largely responsible for keeping the temperature of the lower atmosphere fairly uniform, the physicists report in the American Physical Society journal, **PHYSICAL REVIEW** (Oct. 15).

Science News Letter, November 20, 1948

### ★ ASTRONOMICAL PHOTOGRAPHS

#### LAST CALL SELLING OUT



65 selected photographs made through the World's Largest Telescopes. Yerkes, Lick, Mt. Wilson, Harvard Observatories reproduced in half-tone in

"An Album of Celestial Photographs"  
Size 8½ x 11

De Luxe Copy, heavy paper cover, \$1.50  
Library Edition, bound in press board, \$2.00

A. L. BEDELL—PUBLISHER  
Box 1447-S St. Louis 1, Mo.