

MEDICINE

Anti-Histaminics Upset

One out of five persons taking anti-histaminic cold treatment will suffer unpleasant reactions. Rest in bed during the beginning of a cold is still recommended treatment.

► ABOUT one out of every five persons taking anti-histaminic pills for the common cold will be upset by them, Dr. Perrin Long, professor of preventive medicine at Johns Hopkins University School of Medicine, declared in Washington, D. C.

Dr. Long spoke as guest of Watson Davis, director of Science Service, on Adventures in Science, radio program presented under the auspices of Science Service over the Columbia Broadcasting System.

Disturbances in appetite, lessened ability to perform their job, sleepiness, and palpitation of the heart are among the symptoms that come from anti-histaminics, in the experience of doctors who have prescribed them for hay fever and other allergies.

"While these symptoms are not hazardous," Dr. Long said, "in about five per cent of people who take anti-histaminic drugs they may be so intensive as to make them really serious because sleepiness, grogginess, lack of alertness, diminished power of concentration, and poor muscular coordination may result in ordinary accidents, accidents while operating machinery, and accidents while crossing the street.

"One can imagine the importance of the hazards which may be created by the use of these drugs if one visualizes several million people with diminished alertness and mental fogging driving on the streets and highways and operating machinery."

Under certain conditions anti-histaminic drugs will dry up the nasal discharge both in common colds and hay fever, Dr. Long explained. However, the ability of the drugs to stop nasal discharge is of relatively short duration and the drugs are "only pallia-

tive and not curative in their action," he stated.

The common cold attacks people at all stages of their lives. However, it is least common in babies under one year because of the baby's protected existence. From the first to the sixth year colds are most prevalent. Then comes a period of gradual decrease in number of colds, but at the beginning of the teen age there is another period of increased susceptibility. This lasts until the age of 25. After that, in the population at large, there is a gradual decrease in colds throughout the rest of the lifetime.

Asked what to do about colds, Dr. Long said: "Frankly, we can say, very little, except to stay at home in bed during the first 24 to 36 hours of the infection. If, after doing this, the cold does not improve, if headache occurs, if the voice is lost, if severe cough ensues, or if fever and the general feeling of illness persists, call your doctor and ask him to come and see you. Most colds are self-limited but a number of them hang on and produce secondary complications such as sinusitis, infection of middle ear, laryngitis, tracheitis, and even bronchitis and pneumonia. It is because of these complications that an individual with a cold should take care of himself in order to avoid them, and, if he is so unfortunate as to develop one of them, he should see his physician immediately."

And, he said, there is "not one iota of scientific evidence to back up the popular beliefs that sitting in drafts, getting one's feet wet, over-exerting, losing sleep and other factors supposed to lower resistance will predispose to colds."

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PHYSICS

Lenses Are Mass-Produced

► MILITARY devices with uses not yet revealed by the government were possible during the war because of a secret method of producing Schmidt corrector plates disclosed in Southbridge, Mass. A Schmidt corrector plate provides a lens ten times faster than a high-speed camera lens.

Schmidt-type lenses today are used in the "Big Schmidt" camera on Mt. Palomar and in Schmidt cameras for mass public tests in the campaigns against tuberculosis as well as in secret military instruments.

Dr. E. D. Tillyer, inventor of the process

for which a patent has just been granted and research director of the American Optical Company here, discovered after the war that he had won a race with German scientists. They had been working night and day to perfect a method of mass-producing the lenses.

Prior to the war there were less than 50 lenses of the Schmidt correcting type in the world and these were used in high-speed astronomical photography, Dr. Tillyer states. These required weeks and sometimes months to make, and because of the mul-

tiples curves of the lens, it was considered impossible to mass produce them, according to Dr. Tillyer.

The new process consists of making a special mold having wave-like curves that produce the desired shape in the finished lens. A ground and polished sheet of optical glass is placed on the mold and both are heated. One side of the lens then has the required Schmidt curves, and the other can be reground and polished as desired.

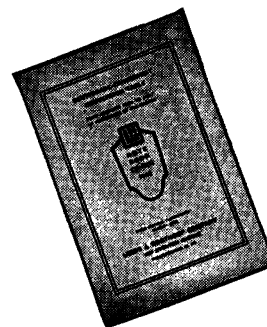
Secret of the mold lies in the materials of which it is made—kyanite and ball clay. The former has a tendency to expand, while the latter tends to contract.

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The *first mechanical clock*, invented about 990 A. D., had no hands but told the time by striking the hour or ringing a small bell.

Lead pencils originated in England soon after the discovery of graphite about 1560; the first pencils were made of graphite sawed into strips and inserted in lengthwise grooves in strips of wood.

The addition of chemicals called *wetting agents* to water makes water more effective in fire-fighting; the treated water spreads more easily and penetrates the burning materials more deeply.



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