

# ARE YOU BEING POISONED?



Workman in an arsenic factory, equipped to withstand the fatal dust. (By permission of the inventor - copyright)

## Recent Investigation Shows that Furs, Rugs and Robes Are Dangerously Loaded with Arsenic so likewise are Some Dry Goods and especially Stockings.

**A**RE you being poisoned? Possibly some of the kind may be happening to you without any warning that you have been able to interpret. If you suffer from frequent headaches, neuralgia, or nausea, it is worth while to inquire if arsenic poisoning is accountable. Government scientists have been investigating the subject recently, and by means of careful analysis they have found that many kinds of dress goods contain enough of the mineral to be dangerous to health. This is especially true of stockings. But furs of all kinds, including floor rugs, are commonly so heavily loaded with the stuff as to carry in their texture a threat of sickness and even of death.

Out of forty-two samples of furs examined by the bureau of chemistry eleven were heavily loaded with arsenic, containing from twenty to 1,700 times as much of the poison as is allowed, as a limit of safety, by the laws of Massachusetts. The standard set by this state is mentioned because it has gone farther than any other in the regulation of the matter which has an important relation to the great textile industries of the cultured commonwealth. In the case of furs the stuff is added during the process of curing, either as a preservative or to repel insects. Inasmuch as such articles are worn around the neck and hands, coming into close contact with the skin, the danger is proportionately great. Of eleven samples of fur rugs and robes examined, every one exceeded the limit of safety, which is put at one grain of arsenic per square yard. None contained less than five grains per square yard, and from this minimum they ran up to 170 grains. Such rugs, it is declared, are extremely dangerous, because the mineral, being present in such large quantities, is liable to be mingled with the dust of living rooms and to be breathed into the lungs. In fact, arsenic in rugs is worse than in wall paper, for the reason that there is more chance of its getting loose in the atmosphere.

### Arsenic Found in Dry Goods.

Several hundreds of samples of dry goods of various kinds were subjected to analysis and it was found that more or less arsenic was commonly present in calicoes, cashmeres, mohairs, flannels, flannellets, and various other fabrics—introduced, of course, as an ingredient of the dyes. Black, red, and green fabrics seemed to be most heavily loaded with the poison. Only 11 per cent of the dress goods contained over

a hundredth of a grain per square yard, but this is declared by the experts to be enough to injure health. Of forty-one samples of stockings, twelve exceeded the limit of safety above mentioned, the black ones being the worst, though two bad pairs were blue.

It is averred that arsenic in stockings is much more dangerous than in dress materials, inasmuch as they are worn next to the skin, so that the poison may be readily absorbed. Some of the stockings examined were for children, who are more susceptible to poisoning than persons of mature years. Doubtless, the chemists state, many cases of sore feet are due to arsenical stockings. But this is not the worst, for when the feet are sore arsenic is readily absorbed through the excoriated surfaces, and it is not unlikely that death sometimes ensues.

### Experiments with Wall Papers.

An interesting discovery in wall papers is announced. Certain species of fungi, commonly known as molds, have importantly to do with poisoning by arsenic contained in such papers. For many years the problem of wall paper poisoning has been regarded as extremely puzzling. One scientist, in Germany, lived for many months for the purpose of experiment in a room the walls of which were painted with a green pigment rich in the poison; yet he suffered no ill effects. On the other hand, there have been many unmistakable cases of poisoning by papers which contained only small quantities of arsenic, as an impurity in their dyes.



Besting the arsenic dust out of beaver skins.

There have been such instances even where such a wall paper was covered with another that contained no arsenic whatever.

The secret of the matter is that certain molds, living sometimes in the paste on the back of the wall paper, have power to decompose the salts of arsenic used in the dye and to convert it into a gas, which, mingling with the air of the dwelling room, is taken into the lungs of the occupants. One of these molds is called *Penicillium brevicaulis*, and recent experiments have shown that when placed in contact with arsenic it develops gas in such quantities as to be dangerous to approach. A rat exposed to it died in convulsions in a short time. The gas, it appears, has a strong odor of garlic—a fact which may afford a suggestion of the presence of a peril that otherwise would not be suspected. There are, however, at least four of these "arsenic-molds," which appear to constitute a class by themselves.

### Use of Arsenic Decreasing.

In old times wall papers were sometimes colored with green pigments consisting almost entirely of arsenical compounds. Samples have been analyzed that yielded from fifty grains to 264 grains of the poison in the square yard. Nowadays, however, owing to agitation of the subject, comparatively little of the mineral is utilized in the dyes employed. Out of 537 samples of wall papers bought by the government bureau of chemistry, only four held more than one-tenth of a grain of arsenic per square yard. The experts say that it is not certain that this amount is harmless. The papers manufactured by one concern contained not a trace of the mineral, showing that it is possible to make wall papers of all colors without the use of any arsenic whatever.

# WAR TO THE DEATH AGAINST CHICAGO'S PETS

**W**AR to the death threatens the pet cat and dog of Chicago.

From decayed or infected animal or vegetable matter more than half of the infectious diseases of Chicago are carried and disseminated by the familiar and often beloved animals of domestic life.

The mouse and rat, scavengers of civilization, become the original hosts of various diseases. The house cat and lapdog, some of which are both mousers and ratters, assimilate infection in the form of germs or parasites, and the infection is finally carried to human beings.

The flea and louse, which have thrives on cats, dogs, chickens, pigeons, and even canary birds, are capable and active in communicating infection to children or grown persons who fondle and pet them.

### Epidemics Traceable to Pets.

Health Commissioner Reynolds says: "I suppose that most of Chicago's epidemics of contagious disease could be traced, finally, to domestic animals. The best we can do under the circumstances is to prohibit the presence of such pets in the rooms and haunts of persons afflicted with infectious diseases. We cannot stop people from having and handling household pets. The favorite terrier with a record for rat killing in back alleys and under garbage boxes may bring diphtheria, scarlet fever, and other contagious maladies into the home. The well tended but adventurous house cat may do the same. The flea that hops from the industrious and profitable backyard hen may bite contagion into its human victim."

Dr. James C. Kierman, one of the most active and best known Chicago authorities on the bacteriological communication of disease, says the medical profession here has as yet taken no active or concentrated steps towards the effective obliteration of this most common source of infection.

### Doctors Sound Warning.

"The most we have done," he said, "was to warn our patients and consultants, prosecute the most assiduous investigations, and give to our colleagues in word and writing the results of our studies. The conservative professional man will hesitate a long time before exploiting in a sensational or hasty manner even those discoveries which seem to him both positive and extraordinary. The anti-cruelty organizations of different cities have done both good and harm in aiding scientific men in the work of restricting and enacting the power of domestic animals to disseminate disease. In New York, for instance, the chief society of this kind has agreed to never interfere with the experiments or investigations of recognized men and societies of science. Here, if surgeons, physicians, and bacteriologists sought to quarantine, experiment with, or destroy animals suspected of harboring contagious germs there would be an immediate outcry from the humane societies. Yet Chicago is daily exposed to the introduction of contagious epidemics by worthless creatures, so-called pets, to which we have no access and for the investigation and quarantining of which there is

no legal provision. And so we prefer to work against the danger without inviting either the hostility of sentimentalists or the theatrical publicity that so often attaches to such enterprise."

### All Pets Under Suspicion.

Dogs, cats, parrots, pigeons, song birds, and all other pet stock are coming rapidly under the suspicion of the bacteriologists and doctors of Chicago. The hostility with which some physicians now regard Fido and Tabby amounts to a threat of extermination against those beloved members of so many households. A few years ago, when it was first suggested that the stray cat of the tenement districts spread the germs of scarlet fever there was much derision and but little corroboration of the discovery.

Since then eminent bacteriologists in London, Paris, New York, and Chicago have been subjecting all sorts of pets to rigid examinations. The Society for the Prevention of



Inviting Contagion



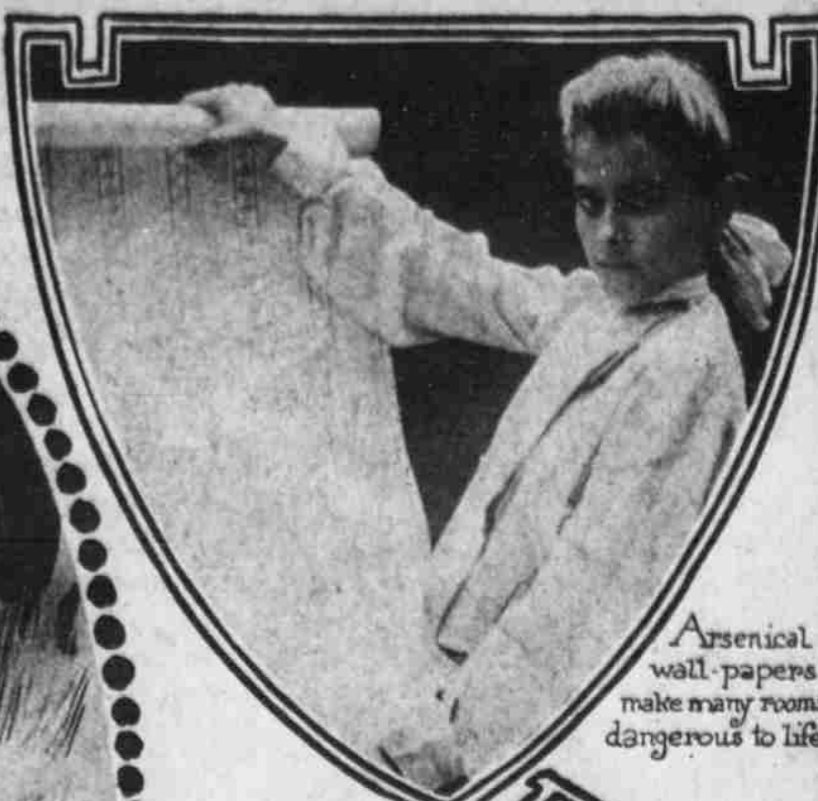
### Don't Allow Pets in Sick Room.

Commissioner of Health Reynolds of Chicago has waged a continual warfare upon the practice of permitting pet dogs, cats, and even birds in the rooms occupied by patients suffering from infectious diseases. His deputies and assistants are all instructed to do everything in their power to prevent cats and dogs from approaching patients ill, or recovering, from contagious maladies. The department has no authority to enforce these safeguards nor any means by which the number of unclean, homeless, or worthless cats and dogs could be destroyed, and it seems quite impossible to carry

Arsenic-dyed stockings are particularly dangerous to children.



Arsenic loaded furs come directly in contact with neck and arms.



Arsenical wall papers make many rooms dangerous to life.



Many kinds of dress goods are heavily loaded with arsenic.



Mary mustn't pet her little lamb.

the war successfully forward against the petted darlings of the household. But the department is thoroughly convinced that the germ carrying animals are one of the greatest menaces to the health of the community, particularly with regard to children.

Dr. Heman Spaulding of the Chicago health department said:

"We believe here that cats and dogs spread more scarlet fever than any other agency. In the pamphlet of instructions to families in the case of contagious diseases it is expressly stated that dogs, cats, and birds must be excluded from the room and presence of the patient, and we try to enforce that rule most stringently during the period of convalescence when, as every one should know, the danger of infection is greatest. But there are a great many people of seeming intelligence who think this rule is only a fad or the result of an uncertain theory and neglect to cooperate with us."

### Dogs and Cats Spread Tuberculosis.

"There is nothing more certain in bacteriological science than that animals both carry the germs of diseases peculiar to human beings, and often are themselves victims of maladies that can be communicated to man. Dogs and cats, for instance, may not acquire scarlet fever or whooping cough, but they are quite subject to tuberculosis and readily impart that bacillus to their human friends and companions as well as to each other. Their gregarious tendency of dogs and that roving disposition of all cats, also contribute to the spread

of infection. The best bred, most carefully attended dog is no aristocrat the moment he meets another dog. The dirtiest cur of the alley looks all right for a playmate, and there is no doubt that many a case of diphtheria, scarlet fever, measles, and whooping cough has entered the most cautiously guarded homes through the unexpected agency of the pedigreed dog or the prize winning cat. The scarlet fever germ thrives on the alley cat because the most depraved, vulgar, and adventurous feline of the garbage boxes and the dump joins with his aristocratic fellow creatures in the midnight soiree and revelries of the neighborhood."

The ringworm, that most common and generally inexplicable skin affection of children, is unusually prevalent in Chicago this summer. It is attributed almost wholly to dogs, which are popularly, but mistakenly, supposed to be suffering from mange. The ringworm, the technical name of which is trichinosis, is usually a temporary and almost harmless humor produced by a tiny creature which causes an inflamed, itchy, irritating spot upon the flesh of the young, but which is also capable of producing "bald spots" and scalp diseases upon grown persons.

It is now admitted by the best bacteriologists of three continents that rats first cultivated and spread the germ of the bubonic plague. The rat killing dog or cat or the household pet which associates with such performers is capable and active in disseminating a score of contagions, which may be collected in night adventure, in play with fellow creatures, or in association with human beings who are suffering from some infectious malady.