

the economy of the place, and in the habits of the people, many things which, according to modern views, are hard to reconcile with such a fact. In the first place there was no general system of sewers. A few houses, occupied by the more opulent, were provided with covered drains, but all these might be counted on the fingers. In the cottages of the men who earned their bread with their hands, and who formed the great bulk of the inhabitants, there was nothing to separate from the open air the offensive matters which collect around human habitations. Each cottage or group of three or four cottages had its common privy, to which a simple excavation in the ground or an open ditch at hand served as the cesspool. Beside this it was a part of the economy of all who worked in the fields, as indeed of many more, to keep a pig, one of whose functions was to furnish manure for the little plot of potatoes, which fed man and pig alike. Thus, hard by the cottage door, there was often not only an open privy but a dungheap also.\*

#### No Fever

Nevertheless, these things existed for many years without leading to any of the results which it is the fashion to ascribe to them. Much there was, as I can myself testify, that was offensive to the nose, but fever there was none. It could not be said that the atmospheric conditions were wanting, because while this village remained exempt, many neighboring villages had more than once suffered severely from the pest. It could not be said that there were no subjects, for these, as the sequel proved, but too much abounded. Meanwhile, privies and dungheaps continued to exhale ill odours without any specific effect on the public health. Many generations of swine innocently yielded up their lives, but no fever of this or any other sort could be laid to their charge. I ascertained by an inquiry conducted with the most scrupulous care that for fifteen years there had been no severe outbreak of the disorder, and that for nearly ten there had been but a single case. For the development of this fever a more specific element was needed than either the swine, the dungheaps, or the privies, were, in the common course of

\*I am happy to say that since the date referred to, a great reform has taken place in many of these things. The town is now drained by a system of well-constructed sewers, and pure water, conveyed in closed pipes from an abundant source about a mile distant, is laid on under high pressure through every part of it. So that, in respect of sanitary conditions, North Tawton is now quite a model of a place. The swine, I am told, remain unmolested.

PSYCHOLOGY

## Gasp is Not Usual Response Of Persons Scared by Snake

Blood Pressure Increased and Breathing Rate Changed In Shocking Situation, Psychologists are Informed

A GASP of surprise is not the manner in which a person responds to the sight of a live snake even if it is over six feet in length, Dr. Harold B. Gaskill, of Iowa State College, told the psychologists gathered at Toronto for the recent meeting of the American Psychological Association.

The rate of breathing, however, in such a shocking situation is changed, he stated. Half the persons whom Dr. Gaskill tested breathed much faster than before they received the shock, but with the others the breathing was slowed to an equally conspicuous extent. Blood pressure increases during fear. Heart rate was sometimes increased and sometimes decreased, but half of those tested showed no change.

Dr. Gaskill also found that reading a short story slows both breathing and heart rates.

The curves of the body of a graceful diver resemble mathematically those of an airplane wing, Dr. Coleman R. Griffith of the University of Illinois reported. As the body is curved at the top of the dive, seemingly poised for a fraction of an instant in air, the mathematical formula for the pattern of the human form is very much like that of a wing designed for a slow-moving airplane. When the body straightens out for entrance into the water, the pattern is like that of a high-speed wing.

By the aid of motion pictures of high dives, aerial casting from trapezes, and backward handsprings, Dr. Griffith has studied the differences between the movements of graceful, highly skilled

things, able to furnish. In the course of time—as was, indeed, sure to happen—this element was at length added, and it was then found that the conditions which had been without power to generate fever, had but too great power in promoting its spread, when once the germ of fever had been introduced. The soil was already prepared; it only required the seed to bring forth the bitter fruit.

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performers, awkward beginners, and persons under the influence of fear. The angles between different parts of the body in the skilled performer change smoothly with the movement. Awkwardness causes too much change in the angles. Fear, because of the accompanying muscular tension, too little.

The saying "there is no accounting for tastes" is disproved by research reported by Dr. Paul T. Young, of the University of Illinois, who has found that food preferences and aversions of experimental animals follow certain definite laws. He is now attempting to find out what these laws are. All the rats studied showed practically the same preferences. Milk stood highest in the list of foods chosen, while flour was the last choice. Some of the foods are chosen to almost the same extent, and in this case the order of preference may shift suddenly. Thus, butter may be preferred to ground wheat one day and the ground wheat chosen the next. But neither is preferred when sugar or fresh milk is available. Rats fed on a diet including cod liver oil tend to place butter toward the bottom of the preferential list.

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ORNITHOLOGY

## Deserted Island is Set Aside as Bird Refuge

ST. KILDA, one of the loneliest islands in the world, has been purchased and set aside as a bird refuge, now that its human inhabitants have left. The island lies off the Hebrides on the northwest coast of Scotland.

Until last year it was occupied by a few families, who lived under conditions of the greatest hardship, and were practically cut off from the world most of the year. They were removed to the mainland, where living conditions are a little better, and their old home left only to the great flocks of birds that had shared it with them.

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