AMERICAN MEN UNPREPARED PHYSICALLY

American men are unprepared to meet the common physical emergencies and demands of life.

To meet the "commonphysical emergencies", three types of prowess are essential.

First, a man must be able to act quickly and accurately in case of an accident, and to develop this ability be must be able to run, jump, vault fences and fall without self injury.

Second, he must be able to maintain himself against any blackguard or cad if a situation arises, and to this end he must box, fence and wrestle well.

Third, he must be able to swim and to save others from a watery death.

These are the views of Prof. E. L. Kleeberger, chairman of the department of physical education at the University of California. To offset these indictments, Prof. Kleeberger declares that college students have a fairly high degree of physical fitness.

In order to prepare California students to meet these "emergencies" of life, Prof. Kleeberger has prepared an extensive program of development as suggested under the first, second and third classifications above.

Already, he reports that students at the state university are better qualified physically than most young men. Universities and colleges are leaders of the movement for better health, according to Dr. Kleeberger, but among the people of America there is a very low general average of physical fitness, which he ascribes partly to a tendency to have specialists and professionals in the field, and partially to our sedentary civilization.

"While it is not possible to build brain matter by physical excrcise," says Prof. Kleeberger, "it is possible to increase intellectual efficiency and capacity by development and continued exercise of the body."

STUDIES ILLUSIONS OF BLUE SHADOWS ON SNOW

What color do shadows on snow appear to you? If it is a clear sunlit day, with blue skies, the cast shadows appear blue, a fact well known to artists and other careful observers. Irwin C. Priest of the Bureau of Standards has been studying this and similar phenomena. One illusion which he has observed is that on a cloudy day with snow on the ground, the snow will appear white and the sky gray, even though measurements with a photometer prove that the sky is much the brighter. If a person is allowed to look at an area of snow or sky without his knowing which it is, he sees it as white or gray, depending on which he thinks it is.

Mr. Priest has now found that the case is similar with regard to the color of the shadows. The greatest effect is not obtained while the observer is fully con

scious of the snow, however; and if the consciousness that it is snow be reduced or eliminated, as by looking at the view on a camera ground glass, the effect is more marked. "Distant snow banks," said Mr. Priest, "may assume the illusory character of 'equivocal figures', being perceived in alternate moments now as white snow banks in shadow and now as blue lakes, without any change in objective conditions."

Mr. Priest is unable to explain the illusion on physical grounds, or by the conditions of the retina, the sensitive lining of the eye. He suggests, however, that they are in accord with the ideas of perception suggested by Helmholtz.

TABLOID BOOK REVIEW

EVENING WITH THE STARS: Mary Proctor. Harper and Brothers, N.Y., 1925. 218 pp.; $2.00.

Richard Proctor was one of the leaders in the popularizing of astronomy a half century ago, and in this book his daughter proves that she has inherited much of her father's talent. In the course of twelve evenings, supposedly at different times of the year, she takes her reader out under the night sky and explains the principal objects that it contains, in a simple yet beautifully lucid style, and with the aid of well prepared diagrams. The half-tone illustrations, which might be more numerous, are, however, well selected, and give the reader an idea of how some of the celestial objects appear through modern telescopes. Ths book is one to be cordially recommended to one who wishes to know something about the oldest and most fascinating of all the sciences - the science of the stars.

X-RAYS: by Maurice de Broglie, translated by J. R. Clarke. E. P. Dutton and Co., N. Y., 1925. 204 pp., $5.00.

To most people X-rays are an aid to the physician or dentist, but that their uses are by no means as limited as that is shown by this book, for one looks in it in vain for any reference to the therapeutic or diagnostic applications ofReentgen's discovery. Instead, it is devoted to such subjects as X-ray physics, molecular scattering of the rays, and X-ray spectra, for in the field of physics, the advent of the X-rays has been as revolutionary as they were in medicine. The author himself has been prominently identified with this new research, and his book is completely abreast of the most recent progress.

The year 1926 is the fiftieth anniversary of the telephone.

Ruins of a city about 1,500 years old have just been found in Sweden.
