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Extravagant Fiction Today . . . . . . . Cold Fact Tomorrow

OFTEN, while reading one of our modern scientification tales, we are wont to explode at some highly "impossible" plot concocted by some ingenious author. And often we receive a letter from some reader who vents his opinion in no uncertain terms that such and such a thing "cannot be within the realms of possibility."

As we mentioned several times, it is difficult to ascertain today just what is possible and what is impossible, for the most "impossible" things have become commonplaces.

Before condemning anything as "impossible," therefore, we should be most careful and a lot more tolerant than we are. Some of the most recently improbable things are now facts. For instance, if some one should come along and tell you a wild tale about ice, boiling hot, you would probably laugh at him. Nevertheless, Professor P. W. Bridgman, of the Carnegie Institute, in Washington, while subjecting water to a pressure of 300,000 pounds to the square inch, found that under such tremendous pressure water first becomes solid, turning into ice, although it is nearly boiling hot. Not only is this "impossibility" a fact, but we all "know," and have been taught, that water can not be compressed very much. just the same, Dr. Bridgman has compressed water to 80 per cent. of its original volume!

When you stand in the hot sun, you are pretty sure that our luminary is sending down a goodly quantity of heat, which makes it so uncomfortable for you on a hot summer day. Tell the man on the street that the sun sends absolutely no heat to the earth, and he will be ready to entrust you to an alienist. Nevertheless, the "impossible" fact remains that the earth receives no heat whatsoever from the sun because the earth and the sun are both immersed in a vacuum. If you have ever seen a vacuum bottle, you know that no heat can be transmitted through a vacuum. If you do not believe this statement, go to the top of a snow-capped mountain, where you are nearer the sun than at sea level, and you will find that, instead of the air being much hotter there, it is much cooler. That is so because the sun sends us, not heat rays, but light rays, which light rays are transformed into heat when they strike a physical body, such as our atmosphere, which then retains the heat. But five miles above the surface of the earth, on the hottest summer day, the temperature is below freezing.

It is "impossible" for a living being to live for any length of time without food. How long can a living being go without food?