

colonies arising from the tracks of flies walking across the gelatine, etc.

The method consists of placing the uncovered Petri dish against photographic paper in a dark corner of the laboratory, bringing forward into the light, and returning to a dark corner for development and fixing. I have had very good results by using Azo hard X exposed to a medium light for five seconds. Good results can also be obtained by using blue-print paper exposed to bright sunlight for forty-five seconds. This paper requires less care in handling in the light and only water for fixing but must be fastened to the Petri dish by spring clip or gummed label to prevent moving during the long exposure.

The result of this direct photography is a positive; that is the white bacterial colonies on the Petri dish appear white on the print; not black as they would on a negative. Careful comparison of the direct prints with ordinary photographs made from a negative shows no loss by the shorter method.

A. A. COPE

SHELL-SHOCK IN THE BATTLE OF MARATHON

TO THE EDITOR OF SCIENCE: Herodotus, describing the battle of Marathon, 490 B.C. (Book VI., section 117), says:

The following prodigy occurred there: an Athenian, Epizelus, son of Cuphagoras, while fighting in the medley, and behaving valiantly, was deprived of sight, though wounded in no part of his body, nor struck from a distance; and he continued to be blind from that time for the remainder of his life. I have heard that he used to give the following account of his loss. He thought that a large heavy-armed man stood before him, whose beard shaded the whole of his shield; that this specter passed by him, and killed the man that stood by his side. Such is the account I have been informed Epizelus used to give.

Is this, perchance, the first account of "shell-shock"?

DEAN A. WORCESTER

THE AURORA OF AUGUST 11 AT BURLINGTON, VERMONT

ON August 11, at approximately 10 P.M. (E'n "Summer" Time), the aurora borealis, as seen in Burlington, Vt., appeared as follows:

On a cloudless night with a nearly full moon, and east-west band of light, from horizon to horizon, increased in brightness as each end broadened northward. The zenith became brilliant violet, an inverted bowl of shifting color. Practically the whole sky was bright: and especially just above the northern horizon intensely white rays shot up toward the zenith. Near the violet center, pale pink and green occasionally showed. The lights lasted for several minutes, lingering longest near the northern skyline.

JEAN DICKINSON

WILL THERE BE ANOTHER AURORA ABOUT SEPTEMBER 7-8, 1919?

THE intensity of the magnetic storm and the brilliance of the aurora of August 11-12 would indicate a disturbed region on the sun, the next presentation of which, opposite the earth about September 7-8, may produce another aurora. Such was the case April 4-6, 1918, following the brilliant aurora of March 7-8.

CHARLES F. BROOKS

QUOTATIONS

LABOR AND SCIENCE

ARE the great industrial countries moving in a vicious circle? The manifesto of the American Federation of Labor, which we publish [reprinted from SCIENCE] in another column, takes this view, and moreover, suggests a remedy. There is an "ever-increasing struggle of the workers to raise the standard of their living." Hitherto this has implied increased wages and shorter hours, or less production at higher cost. But now the "limit has been reached after which the average standard of living can not progress by the usual means of adjustment," by which are meant strikes, politicians' promises and public subsidies. If bankruptcy, moral and financial, is not to ensue, production, says the manifesto, must be increased by research and by the utilization in industry of the results of research. The vital necessity of scientific methods is clearly and cogently stated. In an age of steel and telegraphy, of aseptic surgery and of preventive medicine, of Mendelian breeding