same institution, has been appointed professor of hygiene, succeeding Dr. John A. Amyst, who has been appointed deputy minister of health in the Federal Department of Health, Ottawa. Dr. Fitzgerald will continue to act as director of the Connaught Laboratories.

Professor L. Bard, who for twenty years has held the chair of clinical medicine at the University of Geneva, has accepted a corresponding position at the University of Strasburg.

# DISCUSSION AND CORRESPONDENCE EMIL FISCHER AFTER THE WAR

THE reading of Professor Harrow's highly appreciative account, in Science of August 15, of Emil Fischer and his work recalls to me a meeting that I had with Fischer in February of this year in Berlin. I have referred, in a recent little book about Germany and Germans since the war, to a conversation which Dr. Alonzo E. Taylor and I, officially representing Mr. Hoover and the American Food Administration, had in our rooms in the Hotel Adlon in Berlin one Sunday morning last February with three distinguished German scientific men. The conversation was primarily an interview with these well-informed men on the subject of the German food situation; we were there to try to find out just what food importations were immediately necessary to keep the German people from further suffering and danger. We had talked with responsible officials of the new German government, and been presented with various official statements by them, but we wanted to check these by any unofficial information we could obtain. Hence this Sunday morning meeting in our hotel rooms with Karl Ballod, Germany's foremost economic statistician, Nathan Zuntz, one of her first animal physiologists, and Emil Fischer, her great organic chemist. But as scientific and university men our talk ran rather freely and frankly, and touched other matters than food statistics.

It was a conversation of fascinating interest,

with Fischer the dominant figure in it. Ballod, tall and spare, of serious mien, was rather restrained and precise; Zuntz, small and active, even smiling, was perhaps a little exaggeratedly gracious; Fischer, heavy-bodied, vigorous and emphatic, was easy and with no trace of self-consciousness. All agreed on the terrible seriousness of the situation but each had special views as to the more pressing necessities and means of meeting them. All declared that they had realized for more than a year the practical certainty of Germany's ultimate collapse, but replying to our questions as to why they had not used their knowledge of the fatal food and general economic situation to prevail on the German authorities to try to end the war while an ending might be made that would be less disastrous than any that could come after a further persistence in the struggle, all declared their complete helplessness to exercise a sufficient influence on rulers or people. "We should not have been heard at first and before we could push the matter to a general hearing we should have been in prison or have had to flee the country to avoid it. Remember Forster and Nicolai and Muehlon," they said.

They told of their own difficulties to find food for themselves and families, despite their sufficient financial means, and then spoke especially of the terrible hardships of their less well paid colleagues and small-salaried assistants. Fischer, in particular, revealed his sympathy for his distressed helpers, while all three spoke of the serious handicap the situation had been on the work in the scientific institutions with which they were affiliated.

But while Ballod looked on the future darkly, and Zuntz with no confidence, Fischer was more sanguine. He said: "We have got to start again, but we can start." When we told him that both America and England had made some headway during the war period in the production of dyes and optical glass and some other things that had been a monopoly of Germany in the days before the war, and that we should be far more independent in such ways than we had been before, Fischer was silent a moment, thoughtful and serious of face, but soon looked up and said: "Well, that

<sup>1&</sup>quot;Germany in the War and After," 1919, Macmillan Co., N. Y.

sounds rather bad; but "—and he smiled confidently and made a large gesture with his open hands—"we'll make something new that you'll have to have." It was a fine confidence, and characteristic of the wonder-worker who had all his life been making "something new."

VERNON KELLOGG

NATIONAL RESEARCH COUNCIL, WASHINGTON

#### THE AURORAL DISPLAY OF SEPTEMBER 18

On the evening of September 18, shortly after eleven o'clock and continuing until after twelve, there was the most unusual manifestation of aurora borealis at Fargo that we have ever witnessed. It consisted of an intensely luminous band some five degrees in width, extending through the zenith from one horizon to the other. The eastern end was some fifteen degrees south of east and the western end a corresponding distance north of west. The band was very uniform in width and intensity, though somewhat wider and more intense at the zenith. It had the general appearance of an intense shaft of light from a powerful searchlight, except for its direction and position. At the same time there was a considerable manifestation of aurora at the north, but between that and the band spoken of there was no illumination.

We have never had our attention called to a like phenomenon and we are wondering if it was observed at other points.

C. B. WALDRON

## AURORAL DISPLAYS AND THE MAGNETIC NEEDLE

In connection with the auroral displays of August 11 last, mentioned in these columns on August 22, it may be of interest to mention the behavior of the magnetic needle at Omaha at the time. The wire chief of the Western Union Telegraph Company called me by telephone that morning and said that there was very considerable and unusual trouble with earth currents over the wires between Chicago and Cheyenne as far south as Kansas City. Upon this notification I began to observe the behavior of the magnetic needle. I have two fine needles about 4 inches long, one in a

transit with a full circle, and the other in a plane table with a range of only 5 degrees on either side of the zero. As the first trembled too much on account of the mechanical vibrations of the floor of the room, I confined my attention to the second. I saw the north end of the needle first creep a few degrees to the west, and then by slow stages advance as far as five degrees to the east. Although I kept myself as motionless as possible, I saw the needle swing violently to the west, the full range of the case, through an arc, therefore, of more than 10 degrees, so that it rebounded by its impact against the side. This was at about 5 P.M., Summer Central Time.

A double track electric railway ran north and south about 150 feet to the east of the needle. At almost its nearest point there is a break in both trolley lines, serving as a division point between two sections. This meant that the current supplied over the trolley to the cars was suddenly interrupted whenever the cars came to this division point. I watched the needle very closely at these moments to see whether this feature might account for its oscillations, but could not find the least connection. The next day the needle was as quiet as if it had been riveted to its case.

WILLIAM F. RIGGE

### QUOTATIONS

### SCIENCE AND THE PRESS

Is it possible for the newspaper press to be a useful intermediary between the investigator and the public? Mr. Chester H. Rowell, a well-known American journalist, discussed the question at the recent Pacific meeting of the American Association for the Advancement of Science. Neither here nor in the United States can there be any doubt as to the advantage of widespread knowledge of the methods, the objects, the results, and the personalities of science. Even during the war we suffered much from misapprehension of these. Science was called on to produce, and did produce, magical results as a conjuror produces rabbits from his sleeve. There was no appreciation of the long training, the elaborate