The simplest method to distinguish between two family or subfamily names that would otherwise be spelled alike, would seem to be to add *idæ* or *inæ* to the full generic names in the few cases in which duplication would occur, as *Picaidæ and Picusidæ*. Other expedients would be to write *2d* after the later name, or the year in which the name was published, or the Greek letter β. To make a prefix as *Pro* a part of the family or subfamily name and so cause the name to appear in alphabetic lists far away from its logical place and to lead the uninitiated into thinking of a *Pro* genus which does not exist seems as absurd as it is unnecessary.

M. W. Lyon, Jr.

THE NEEDS OF MEN OF SCIENCE IN RUMANIA

To the Editor of Science: Please publish in Science the following extract from a letter of Professor Marinesco, a leading scientist and physician in Rumania.

. . . . I believe that our American colleagues, whose country made such a noble contribution to victory, ought to take notice of the unhappy state of the Rumanian men of science which is due to the occupation of our country by the enemy. It is probably unknown that after the occupation we were in extreme distress, because all our instruments were then taken away or destroyed. A part of our libraries has been destroyed. Furthermore, since Rumania has no chemical industries, we do not possess the chemical reagents, etc., indispensable for scientific research. Allied European countries which would aid us, France for instance, have been equally devastated.

Perhaps the United States which has contributed so largely to the restoration of Europe would make a grand gesture and help the investigators of our country by sending some instruments and a certain amount of reagents as far as they are able to do so. They can not be accepted gratuitously; but we believe that we will be able to repay the debt later when the unfavorable exchange no longer weighs so heavily upon our laboratory budgets.

Hoping that my prayer will find a favorable response among my American colleagues, we would like you to be our spokesman.

S. J. Meltzer

Rockefeller Institute, New York,
September 1, 1920

QUOTATIONS

SCIENCE AND THE PUBLIC

This is the heading of a leaderette in the *Daily Mail*, which states that "Light is to be 'caught bending' next week at Cardiff." It goes on to say that "We have in Britain today as original a group of scientific men as any country in the world; and they are beginning at last to see the wisdom of coming out of their caves and laboratories and applying their brains to practical affairs; to the laws that govern heredity, to wireless apparatus, to the uses of alcohol, to the migration of fish, to medicinal thought-reading, to the possibilities of intensive cultivation—which bulks largely this year—indeed to scores of practical themes to which their more abstract studies are leading.

"In any case, it is time most profitably spent if for one week in the year our men of science bend their united energies to the work of interesting the public in the advance of science. It is as much the duty of the public to appreciate the men of science as of men of science to come to meet the public."

Now, what does the *Daily Mail* think "our men of science" had been doing during the period before they began to see the wisdom of coming out of their caves and applying their brains to practical affairs? Does it really think that they have suddenly awakened and hurriedly worked up papers on the laws of heredity, on wireless apparatus, etc., just for the purpose of interesting the public during this British Association week?

The *Mail* speaks of "our men of science" with a patronizing air, a kindly condescension which implies that they are rather weird uncanny folk, not quite normal, who dwell in "caves and laboratories," and do not usually apply their brains to practical affairs—so unlike the brainy trumpeters of the daily press, who gaily talk of "catching light bending" without having the faintest conception of the significance of the allusion. This superior attitude of the journalist who, in many cases, can not even write English correctly, and whose mind is blankly opaque to the most elementary notions of physical science, is galling to those

who are able to appreciate the nature and value of the work of that band of British scientific heroes, without whose efforts, the result of long years of patient training in research, the war would inevitably have been lost, on the land, on the sea, and in the air. If the lay press would descend from its wooden pedestal and inculcate in the public mind that knowledge and love of science through which "our men of science"—unexcelled in the whole world—acquired their equipment for winning the war, instead of perpetuating the silly and antiquated notion that they are habitually immersed in useless hobbies of no practical utility, it would do real service to the country.—The London *Electrical Review*.

NOTES ON METEOROLOGY AND CLIMATOLOGY

TORNADOES

A FEW weeks ago an official of the Weather Bureau was asked this question: How many tornadoes will a healthy cyclone hatch in a day? This, naturally, was a difficult question to answer; but it must be admitted that the tornadoes of March 28, in the middle western and southern states, and those of April 20 in Mississippi, Alabama and Tennessee, afford striking examples of the fecundity of barometric depressions when other conditions are favorable. The *Monthly Weather Review*[1] for April, 1920, contains about 18 papers, discussions, and notes concerning these very destructive tornadoes, as well as those which occurred in North Carolina and Oklahoma on April 12 and May 2, respectively.

Eleven of the thirteen tornadoes of March 28 occurred in the region surrounding lower Lake Michigan and two occurred in western Alabama and eastern Georgia. It appears that they were associated with the passage of the squall front or line of wind-convergence which marked the barrier, in the southeastern quadrant of the deep "low," between southeasterly and southwesterly winds. The "low" which gave rise to this wind-shift line moved from east-central Nebraska to northern Wisconsin in the course of the day. In the region of lower Lake Michigan, it was possible to trace the hourly progress of the line as it advanced on a slightly curved front in a general east-northeasterly direction. It appeared at 6 A.M. in northeastern Missouri and southeastern Iowa; at noon, it extended along the eastern line of Illinois northward to the lake, thence curving northwestward into Wisconsin; at 9 P.M., it had almost reached Lake Huron, and was over the western end of lake Erie. As its northern end reached Lake Michigan, there was a perceptible forward bulge which may be attributed to the decreased friction as the wind advanced over the smooth water surface.

Regarding the circumstances under which these tornadoes were formed, Dr. Charles F. Brooks, in his discussion, says:

> Why did these 13 tornadoes occur on the afternoon of March 28? Let us review the facts as brought out by the weather observations:
>
> 1. There were strong, unusually warm winds from the southeast and south-southeast over a large area from the Gulf of Mexico to the Great Lakes.
>
> 2. A well-marked line . . . separated these winds from still stronger, but slightly cooler southwest or south-southwest winds in a belt immediately to the west.
>
> 3. Heavy thunderstorms, some with tornadoes and hail, occurred along this line of converging winds.
>
> 4. Immediately to the west of the northern portion of this line was a belt of diverging winds, characterized by brilliantly clear skies and exceedingly dry air, the driest on record at some stations. . . .
>
> 5. Kite observations indicated the presence of a cold southwest-west wind at a moderate height overrunning the warm surface wind.
>
> 6. The northeasterly movement of the tornados and lower clouds and the fall of hail on or to the east of the tornado paths indicated a southwest to, at least, west-southwest wind not far aloft.

Surely this was an unusual set of conditions. With winds meeting at an angle of about 60° and at a rate of about 30 miles an hour, large volumes of air were sent upward and given a counter-clockwise rotary motion by the thrusts of the southwest squalls routing under the rear portions of the

[1] Papers on tornadoes, pp. 191–213. Reprints of these papers may be obtained upon application to the Chief, United States Weather Bureau, Washington, D. C.