now in progress in the writer's laboratory along these lines.

THEODORE E. FRIEDEMANN
DEPARTMENT OF MEDICINE
UNIVERSITY OF CHICAGO

SEASONAL EFFECT OF LIME ON STRAWBERRIES

LIME is very essential on the very acid soils of the famous Hammond, Louisiana, strawberry section to carry the plants through the summer. Experiments by A. H. Meyer and B. Szymoniak, of the Louisiana Experiment Station, with various amounts of lime indicate that a pH of 5.0 to 5.5 is best for the dormant season of the strawberry, which is during the hot months of the summer, whereas with lime the plants came through in a vigorous condition. To the contrary, in the cool part of the year, even on the check plats with a pH of about 4.0, the strawberries did well vegetatively. As the strawberries were badly injured in the spring of 1933 by a late frost, no apparent differences were revealed from the yields of the unlimed and limed plats. The dying of the strawberry plant in the summer on the unlimed plats apparently is due to less resistance to aluminum toxicity or else to a greater solubility of the aluminum during the summer.

A. H. MEYER
LOUISIANA STATE UNIVERSITY

SPIRALING IN TREES

I HAVE read with much interest the articles and letters in SCIENCE and in *Nature* during recent years on spiraling in trees. Because all other explanations seem so inadequate I was beginning to consider it an innate and heritable character, this supposition being supported by the fact that the type of spiral found in the trunk is present also in the branches.

However, a few days ago I found a dead tree that was irregularly spiraled. About head high for 3 or 4 feet it spiraled to the right and above that for 5 or 6 feet it spiraled to the left. Still higher up it seemed to be irregular, but I could not be so sure, as more bark was still in place there. The tree was about eight inches in diameter and all in the party agreed that it was some kind of gum tree. Gum wood is notoriously difficult to split, and this may be due to such irregularity of grain.

I found also a dead sapling about 1¼ inches in diameter that spiraled to the left. It was quite decayed and on breaking it open found a separate inner core about ⅝ inches in diameter that spiraled to the right. These appeared to be the first and the second year's growth. I could not determine the kind of tree it was. This recalled to my mind that in central India the wood commonly used for furniture and for building purposes has such irregular grain that it can not be planed because whichever way one tries to plane it the plane runs into or against the grain. The native carpenters do not use an ordinary plane bit with a smooth cutting edge but one with the edge of the plane bit finely notched. I did not investigate closely how the grain is arranged, but now I wonder if possibly it may have been due to annual reversal of spiraling.

These irregularities make the inheritance hypothesis of spiraling difficult, but whatever the cause of spiraling may prove to be these irregularities must be taken into account.

Along the Sky Line Drive in Virginia are countless thousands of dead trees that have lost their bark and have been weathered sufficiently to show the grain clearly. This would seem a favorable place to study spiraling.

E. C. L. MILLER
VIRGINIA ACADEMY OF SCIENCE
RICHMOND, VA.

QUOTATIONS

THE NEW MATHEMATICS[1]—A LECTURE BY PROFESSOR BIEBERBACH

IT had appeared hitherto that mathematics, of all the fields of intellectual endeavor, would continue to preserve its neutrality, even in the fiery furnace of the revolution. However, a noteworthy lecture delivered by Professor Bieberbach, the brilliant exponent of function theory and *Ordinarius* at the University of Berlin, before the annual meeting of the *Verein zur Förderung des mathematischen und naturwissenschaftlichen Unterrichts* on Easter Tuesday at the Berlin Technische Hochschule, seems to indicate that the doctrine of blood and race is encroaching even upon this domain and subordinating the most abstract of sciences to the totalitarian state. In this respect, historical significance for developments in the Third Reich may be ascribed to the speech of Bieberbach.

Bieberbach chose as his starting point an actual occurrence, the dispute between the Göttingen student body and Edmund Landau, the famous number theorist, and the stormy rejection of this teacher by the students. This attitude (Bieberbach asserts) is well founded and justified; for the case of Landau shows clearly that there is a German and a Jewish mathematics, two worlds separated by an unbridgeable

[1] Translation of an article appearing in the Sunday, April 8, 1934, issue of the *Deutsche Zukunft*, a German national weekly.