

# WILD\* M-20

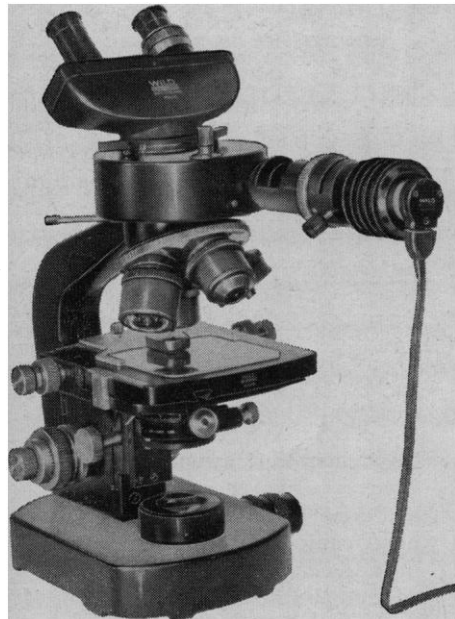
## with incident light attachment

One of the most important advances in microscopy for research and scientific exploration is now within easy reach of the owner of a Wild M-20.

Here, in a superbly Swiss crafted instrument, capable of the finest results in all types of microscopy, is now added a new, first order capability:

With Incident Light Attachment, the M-20 permits observation and photomicrography under bright and dark field conditions, with polarization and fluorescence. Optical quality and handling convenience are fully comparable to those found in specially designed incident light microscopes.

For full information about this most versatile microscope...and its many attachments, write for Booklet M-20.



\*The FIRST name in Surveying Instruments, Photogrammetric Equipment and Microscopes.

**WILD**  
HEERBRUGG

Full Factory  
Services

INSTRUMENTS, INC.

Main at Covert Street • Port Washington, New York  
Port Washington 7-4843

In Canada

Wild of Canada Ltd., 157 MacLaren St., Ottawa, Ontario  
486

## Letters

### American Astronautical Society

I recently read in the news section of *Science* [131, 1658 (1960)] the item on the new International Academy of Astronautics, established by a Guggenheim grant. In the interest of accurate reporting and courtesy, I should like to point out a glaring error in this note. In describing the International Astronautical Federation, the item states, "The United States member, the American Rocket Society . . .," implying a single member from the U.S. This is incorrect. There are, in fact, three American societies in the federation. In addition to the American Rocket Society, the American Astronautical Society has been a member since 1954, and in 1959 the Aerospace Medical Association was elected to membership.

The American Astronautical Society is the only American society devoted solely to the advancement of astronautics and was the first in this country to offer comprehensive technical programs in all fields of astronautics. It has also been very active in IAF activities through committee work in the past years.

GEORGE R. ARTHUR  
*American Astronautical Society,  
New York, New York*

### Federal and State Support of Science

The issue of *Science* for 22 April contained several unusually interesting and significant articles. Particularly noteworthy was the excerpt from *Notes on the Reviewing of Learned Books* [131, 1182 (1960)] by the late George Sarton. The procedures outlined by Sarton are such as to deserve consideration by all of us.

Paradoxically, the very next issue of *Science* [131, 1307 (1960)] contained a book review, by Harold L. Enarson, of *Science and State Government* by F. N. Cleaveland, which conforms to very few of Sarton's recommendations. Even more unfortunate, the review contains implied statements of fact that are undocumented, which are simply the opinions of the reviewer.

Particularly regrettable are the following passages in the review:

1) "The notion of shared responsibility between the federal government and the states in scientific activity is extravagant nonsense. The big money comes from Washington; the pattern and pace of government research effort

is determined in Washington, whether in research on agriculture or on mental illness."

2) "Scientific activity in the states reflects the traditional obsessions, notably the heavy emphasis on agricultural research and on applied research generally. Perhaps the states may be 'chasing the wrong rabbits'. . . . The talents of researchers at the state university are rarely mobilized to bear on the . . . problems of a state."

I hold no brief for Cleaveland's book. It undoubtedly has shortcomings that deserve critical comment. But the above quotations from the Enarson review are the kind of sweeping generalizations, highly charged with personal opinion unsupported by evidence, that one does not expect to find in a journal read by scientists. It is because the implications and conclusions of the reviewer are so patently contrary to fact that I feel impelled to call the matter to your attention.

On page 41 of the book, the federal contributions to state expenditures for scientific activities are listed. Among the six states surveyed, the federal support ranged from 10.3 to 33.6 percent. The average was 26.9 percent.

On pages 55-56, the text shows that federal contributions to agricultural research represented only from 7 to 22 percent of the total invested in five of the states. For one state (New Mexico) it was 31 percent. Thus, in fiscal 1954, the period covered by the survey reported in the book, the big money did not come from Washington in respect to total state expenditures for scientific activities, or in respect to state expenditures for agricultural research.

It is true the survey shows that 26 to 52 percent of the total state expenditures for scientific activities were in support of agricultural research. On the other hand, it is explained on pages 24-25, "the relative importance of research in agriculture is exaggerated by the limited amount the state expended on operating programs in agriculture—less than on the operations of the other three fields of governmental activity (that use research extensively)."

The operating programs in agriculture tend to be largely the responsibility of the federal government. The U.S. Department of Agriculture conducts research, but the funds available to the department for research in agriculture and forestry are a small fraction of the billions being used annually in the department's operating programs, such as crop acreage control and price supports.

Nor is this the only, or even the most important, factor explaining the apparently more generous support of research in agricultural experiment stations than in most of the other branches or col-