dolicocephalic peoples. The dimensions obtainable are

Glabello-inion length	191.5 mm. (?)
Probable euryon breadth	127.5 "
Minimum frontal diameter	94.0 "

In contour the calvarium resembles very closely the people of Cayuga skull (Fig. 2) presented in Morton's volume,[3] which has the following approximate dimensions:

Glabello-inion length	195.0 mm.
Euryon breadth	127.5 "
Minimum frontal diameter	105.0 "

In our calvarium the frontal bone extends rather further backwards on the vault than in the Cayuga skull.

In Hrdlička's excellent résumé[4] the Rock Bluff cranium discovered in 1866 most closely resembles our specimen. The dimensions of this cranium are

Glabello-inion length	195.0 mm.
Euryon breadth	137.0 "
Minimum frontal diameter	97.0 "

Hrdlička's description fits our skull equally well. Its most noteworthy feature, and that which gives it the appearance of a specimen of low type, is its greatly developed supraorbital ridges. These are not in the form of arcs, however, as in anthropoids and in the human skulls of Spy, Neanderthal, etc., and to a less extent in the two Calaveras specimens, but involve, as general among Indians, only about the median three fifths of the supranasal and supraorbital portions of the frontal bone. They project greatly forward, however.

In comparing the profile of our calvarium with that of Brünn[5] we note that whereas the supraorbital ridges of both are equally pronounced, the Brünn specimen has a lower vault and less prominent forehead.

The calvarium is devoid of organic material, but this may well occur within a century of burial. There is no mineralization or other evidences of great antiquity such as would be indicated by relationship to the Conard Fissure material[6] from northern Arkansas.

[3] Morton, S. G., *Crania Americana*, Phila., Plate 35, 1839.

[4] Hrdlička, A., "Skeletal remains suggesting or attributed to early man in North America." *Forms Bull.* 33, of Smithson. Inst. Bur. Am. Ethnol. 30, 1907.

[5] Schwalbe, G., "Das Schädelfragment von Brüx und verwandte Schädelformen." *Ztschr. f. Morphol. u. Anthrop.*, 9, 81–182, 1906.

[6] Brown, B., "The Conard Fissure; a Pleistocene bone deposit in northern Arkansas," *Manual* American Museum of Natural History, 9, 155–208, 1908.

Mrs. Babcock and the Museum of Natural History and Antiquities are to be congratulated upon the zeal which saved this specimen from oblivion, and, although there is no reasonable doubt of its belonging to an American Indian with a head shaped like that of the notorious Cayuga, its primitive character indicates that we may hope to find other evidence of low grade dolicocephalic people in the locality.

HARVEY S. THATCHER
UNIVERSITY OF ARKANSAS,
SCHOOL OF MEDICINE

BIBLIOGRAPHY OF COLORIMETRY

IN connection with the work of the colorimetry section of the Bureau of Standards and the report of the colorimetry committee of the Optical Society of America, I am desirous of compiling a bibliography of papers and books having direct bearing on colorimetry, spectrophotometry, and color specifications. It is expected that this bibliography will ultimately be published in the Journal of the Optical Society. It will also be of use in replying to frequent inquiries for information on this subject. In the interest of completeness and accuracy, all authors who have contributed to this subject are requested to send me check lists of their papers giving titles and complete journal references.

The following subjects are mentioned as illustrative of the classes of material desired:

1. Color of daylight and artificial sources. (Spectral distribution of energy, color temperature.)
2. Visual psychophysical data. (*E.g.*, visibility of energy, hue discrimination, saturation discrimination, brilliance discrimination, excitations, abnormal color sense.)
3. Theories of color vision.
4. Methods of computing the trilinear coordinates, dominant wave-length, and purity from data on spectral distribution.
5. Spectrophotometric instruments and methods.
6. Spectral transmission of materials.
7. Reflectance of materials.
8. Colorimeters.
9. Systems of color standards.
10. Applications of colorimetry and photometry to chemical analysis.
11. Turbidity and scattering of light.
12. Color nomenclature and terminology.

Reprints will also be of real service and will be gratefully received. I already have a considerable collection of such reprints. They are classified by subjects, and are of great assistance to those engaged in colorimetric research at the Bureau of Standards. This collection has been profitably used not only by regular members of the staff but by temporary re-

search associates and visitors at the bureau. It is desired to keep it up to date and make it as complete as possible. Authors who have reprints available can very effectively assist in the dissemination of information by contributing copies to this collection, since by consulting it workers on a given subject can find together in one place the pertinent literature, the discovery of which would otherwise require diligent and laborious search through many scattered journals on physics, chemistry, psychology, physiology and sundry kinds of technology.

IRWIN G. PRIEST

BUREAU OF STANDARDS,
WASHINGTON, D. C.

NO METEORITE

ON November 12, 1927, newspapers in the Eastern States carried a New York *World* News Service statement that on November 11 a meteor, accompanied by a bolt of lightning, struck at Fairdale, near Montrose, Susquehanna County, Pennsylvania. The lightning set fire to a building and the meteor made holes 12 to 14 inches in diameter in the concrete highway. Of particular interest was the statement that around these holes in the highway was discovered a strange substance that very much resembled bituminous coal.

The Pennsylvania Geological Survey made inquiry through different channels and received a most satisfactory reply and explanation from H. R. Moffitt, district engineer, Pennsylvania Department of Highways, at Scranton. He writes:

> Lightning struck a barn to which an aerial was attached, running thence to the house and down the ground wire and was apparently conducted through the water that covered the ground at this location, to the pavement. The pavement in several places was shattered along the edge about 10 inches in from the edge and about three inches deep, where the concrete was broken out exposing the reinforcing. The total breaks can be repaired with about one gallon of tar and one hundred pounds of stone. The asphalt crack filler, in several places, was blown out and burned and the material resembled soft coal, which I believe gave rise to the newspaper account of the story.

This note is published so that future catalogs of meteorites will not include this one from Fairdale, Pennsylvania.

R. W. STONE

HARRISBURG, PA.

CONSIDER THE USER OF BULLETINS

IN SCIENCE of December 9, Professor R. J. Barnet, under this cleverly worded title, has given some very good advice to those who control the make-up of bulletins. But he might very justifiably have gone further. Those of us who have to consult the technical and non-technical bulletins of the federal government, of the States and of other institutions, often find fault; and as to the librarians, those long-suffering people deserve our very deep sympathy.

Professor Barnet seems especially annoyed by the difficulty he has had in finding the names of the authors of certain American bulletins, and urges very sensibly that these names be displayed uniformly on the cover page or the title page. My first reaction was the reflection: "Well, after all, we do better than the British." I had in mind especially some of the publications of the Board of Agriculture and Fisheries, the authorship of which I have seldom been able to learn. The beautifully illustrated, but anonymous No. 44 of the "Miscellaneous Publications" of this ministry, entitled "Wasps," pleased me so much that, after a very considerable effort, two years in duration, I learned that it was written by that competent entomologist, R. A. Stenton, now of the Parasite Laboratory of the Imperial Bureau of Entomology at Farnham Royal.

But we must not criticize our British friends while we ourselves are open to criticism. We do not follow the advice of our own best people. As long ago as 1919 the Association of Agricultural College Editors formulated recommendations on the very points brought out by Professor Barnet, and yet they have not been followed by all.

Professor Barnet might have pointed out other things. I have been talking them over with Miss Mabel Colcord, the skilled librarian and bibliographer of this bureau, and from our somewhat different viewpoints we have sympathized about several of these other things. How is one to give exact references with the minimum of trouble when such magazines as *The Scientific American* and *The Scientific Monthly* conceal volume and number in their advertising pages? What is one to do about a repaged reprint (See R. H. Rastall, *Nature*, March 20, 1926, page 418)? Then too, why should scientific men from time to time, as they do, send out reprints or preprints carrying only author's name and the title of the article, with no date and no indication of what it is taken from? Why should the division reports from the various British colonies fail to state the country they represent? Why, in bibliographic lists, should translated titles be given without also the title in the language and the wording of the author? In simple justice to the author, it seems that it should be given as he states it. *The Experiment Station Record* of this department fails in this respect. There are other questions of this kind. They have been discussed, most of them, elsewhere and at various times.