

turning part of an Arkansas National Forest into a national park. It was opposed by the Secretary of Agriculture and Forest Service as a dangerous precedent for local looting of the national forest; by the Secretary of the Interior and National Park Service as a fatal precedent for crowding the system with low-standard parks in the interest of local business; and by hundreds of public-spirited associations and thousands of individuals.

Those who favored the project frankly argued that local business needed motor tourists. Besides, four neighbor states needed another Arkansas national park because few of their people could visit the western national parks! As if calling it a national park would impart to it the gorgeous beauty of Yosemite! To these old arguments will be added attack on national park standards of quality "because they are not broad enough to cover State needs." Also, now, to serve as a memorial!

If the old bill to make the area a new national park seems doubtful of passage, another will be substituted to make it a separate "floating addition" to Hot Springs National Park, also in Arkansas. This, it is thought, might be easier to pass. Why, it is difficult to understand.

Meantime promoters of a score or two of other projects below national park standards of quality will keenly await the precedent.

ROBERT STERLING YARD  
*General Secretary,*  
*National Parks Association*

#### A NEW METEORITE FROM THE BLACK HILLS

THE South Dakota State School of Mines has recently added to its geological museum an iron meteorite found during the summer of 1931 on North Redwater Creek near the eastern base of Bear Lodge Mountains—a subordinate portion of the Black Hills—in Crook County, Wyoming. It was unearthed by a workman while repairing the highway leading westward from the postoffice of Farrall, the site of the find being approximately twelve miles northeast of Sundance, the county seat of Crook County. There is no information available as to the time of its fall.

The meteorite, designated as the Bear Lodge meteorite, is a rough, compact, angular mass fourteen inches long, ten inches wide and six and one half inches high in the highest part, measured perpendicular to the rather flat base. Its weight as found was one hundred seven pounds seven ounces. It is covered with a thin coat of reddish brown, dimly mottled oxide resembling ordinary iron rust. Much of the surface is coarsely pitted, the individual pits being irregular, more or less coalescing depressions an inch

or more in depth and from one to two or three or more inches in diameter. The flattened surface, designated as the base, is an irregular, somewhat rectangular area approximately twelve inches in longest direction and approximately eight inches wide. One corner of the specimen projected prominently, and this portion, removed from the main mass and weighing about three pounds, has received preliminary examination.

Analysis of unoxidized drillings shows iron to the amount of 91.70 per cent. and nickel 8.12 per cent. An etched surface discloses characteristic crystallographic figures and a number of fine thread-like cracks or fissures. The meteorite is being studied by Professor J. P. Connolly, of the department of Mineralogy and Petrography, and it is expected that at a later time a more detailed description will be given.

CLEOPHAS C. O'HARRA  
SOUTH DAKOTA SCHOOL OF MINES

#### INFECTION OF THE CLOACA WITH THE VIRUS OF INFECTIOUS BRONCHITIS

A VIRUS disease, known as infectious bronchitis, is responsible for wide-spread losses in poultry flocks. The suggestion that the virus might also be made to attack the cloacal tissue without harmful results and with subsequent immunity presented itself. Accordingly, an infected cotton swab was introduced into the cloaca of a bird with the result that after three days an acute inflammation developed in the proctodeumal portion of this structure. Four days later a cotton swab infected from this bird was used to inoculate the cloaca of another, which in turn showed the same disease process. Thereafter the virus was carried through four more generations at intervals of three days.

Each of the birds infected in the cloaca also furnished material for inoculating another bird intratracheally. These birds showed the typical symptoms of the disease, and all but one of the five inoculated recovered.

The recovered birds were tested for immunity at the close of the experiment. Those previously attacked in the cloaca resisted tracheal inoculation and those recovered from tracheal inoculation resisted cloacal infection. At this time the inoculated birds had received their immunizing dose 11 to 27 days previously. Experiments making use of cloacal inoculation as a practical means of immunization are now under investigation.

C. B. HUDSON  
F. R. BEAUDETTE  
NEW JERSEY AGRICULTURAL EXPERIMENT  
STATION,  
NEW BRUNSWICK