Orleans Weather Bureau Office. By the aid of this map the Bureau was able to give timely warning of the flooding of parts of the Atchafalaya Basin and towns therein that never before in the 200 years since settlement of the region had been reached by flood waters.

A. J. HENRY

DIVISIONS OF THE DECORAH FORMATION

IN studying the stratigraphy and paleontology of the Ordovician Decorah formation in northeastern Iowa, it has been found advisable to divide the formation into three members, here named and defined. The lowest of the three, the Spechts Ferry member, has as its type locality the ravine southwest of the C. M. and St. P. railroad station of Spechts Ferry, Dubuque County, Iowa, at which place the eight and one half feet of shales and interbedded limestones form a lithologic unit lying above the "Platteville" limestone; the "Platteville" of Iowa does not include the uppermost beds of the typical Platteville of southwestern Wisconsin. The Spechts Ferry member includes the "glass rock" and overlying shales at the top of the typical Platteville. The member is of latest Black River (Watertown) age.

The middle member of the Decorah formation, here named the Guttenberg, consists of about fifteen and one half feet of brownish, fine-textured limestone at its type section in the bluff of the Mississippi River just northwest of the town of Guttenberg, Clayton County, Iowa; northward from this locality this limestone grades into shale. In northwestern Illinois the Guttenberg is the "oil rock" member at the base of the Galena formation.

In the N. W. ¼ of sec. 35, T. 96 N., R. 4 W., the Guttenberg limestone is overlain by sixteen feet of calcareous shale and argillaceous limestone that constitute the type section of the top member of the Decorah, here named the Ion member. The type locality is about a mile southwest of the hamlet of Ion, Allamakee County, Iowa. The Ion beds become more argillaceous to the northward, more calcareous to the southeastward.

The limestones of the two upper members of the Decorah have been irregularly dolomitized in the southeast part of their Iowa outcrop. The Guttenberg and Ion members are of basal Trenton (Rockland) age.

The Decorah formation thus consists of three members, in descending order, the Ion, Guttenberg and Spechts Ferry members, the type localities of which have been designated.

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A DAYLIGHT METEOR

I READ with interest the two notes that appeared in SCIENCE, entitled "A Daylight Meteor," the one of William L. Bryant which appeared in the issue of July 22, 1927, and that of Frederick H. Getman of October 14, 1927. These recall a daylight meteor which I saw in May, 1890.

I was working in a gravel pit at Maxwell, near Des Moines, Iowa, when my attention was drawn to a streak of bright red which dashed from 15 degrees west of the zenith toward the northeast, like a streak of lightning out of a clear sky, for there was not a cloud in sight. I called other workers' attention to it, all concluding that it alighted six or eight miles about north of us—when the papers the next day gave an account of its falling 400 miles distant, in northern Minnesota. The papers also stated that it exploded just before reaching the ground, and that the concussion caused by same broke out all the window lights in several small settlements in the vicinity of where it fell.

This meteor left a trail of smoke (and dust?) behind it which drifted about in the sky all the rest of the afternoon, not having settled at dark that night. This streak of smoke first appeared in a straight line along the line the meteor had fallen, then became wavy, showing different currents of air acting upon it.

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INDIAN FIELD SERVICE, ARIZONA

INTERFERENCE?

WHILE on a large forest fire on the Columbia National Forest in Washington, August, 1927, an unusual optical phenomenon was observed shortly after noon one day. The sky was clear save for the smoke column from the fire. This column was very compact, so much so that the upper protuberances had the appearance of burnished metal and the disc of the sun was not discernible through the smoke. The angle of the sun with respect to the observer was slightly below the top of the smoke column. On the N or NNW side of the top of the column there was a broad band of black. This band did not quite touch the smoke column, there was a narrow ribbon of blue sky visible in between, but it extended outward for several hundred feet, assuming that it was a mile or mile and a quarter distant. The band did not appear to be a shadow, there could have been nothing behind it but blue sky yet it seemed as opaque as a strip of black cloth hung in the sky. It is unfortunate that a camera was not available as it probably would have photographed with good definition.

Perhaps someone can explain the optics of this odd phenomenon.

A. GAEL SIMSON

QUOTATIONS

DR. F. A. BATHER

IN February next, after forty years' service in the British Museum (Natural History), Dr. F. A. Bather retires from the post of keeper of the department of geology. His vigorous and cheery personality will be missed by geologists visiting the museum no less than by his colleagues. Educated at Winchester and Oxford, he joined the staff of the British Museum in 1887 as assistant in the department of geology and was placed in charge of the echinoderma. After becoming assistant keeper, and later deputy keeper, he succeeded Sir Arthur Smith Woodward as keeper of the department in 1924. Dr. Bather was elected F.R.S. in 1909; was awarded the Lyell medal by the Geological Society in 1911; has been president of section C of the British Association and of the Museums Association; he is now president of the Geological Society. Dr. Bather's original work on the paleontology of the echinoderms has gained him a world-wide reputation, and amongst the distinguished paleontologists of today he stands in the front rank. His memoirs and papers are too well known to need mention here; not only are they models of scientific method, but also they possess a literary charm seldom found in the writings of scientific authors.

In his presidential addresses to section C of the British Association at Cardiff (1920), and to the Geological Society last February, Dr. Bather dealt in a masterly manner with the principles of paleontology, and his listeners felt that those addresses were worthy of Huxley. Dr. Bather does more than look on fossils from the point of view of a morphologist and evolutionist; as is so well shown in his "Caradocian Cystidea of Girvan," he regards them as animals which once lived, and endeavors to correlate form with function, morphology with physiology. For several years Dr. Bather contributed the section on Echinoderma to the *Zoological Record;* although these are masterpieces of bibliography and analysis, one can not avoid a feeling of regret that so much of his time was taken away from original research. In another direction, by the active interest which he has taken in the work of the Museums Association, Dr. Bather has rendered good service to his country; he has contributed many papers to the association's journal dealing with the preparation and exhibition of specimens and other matters of importance to the curators of provincial museums. After his release from the cares and responsibilities of office, all who know Dr. Bather, whether personally or only from his writings, will fervently hope that leisure and health will enable him to continue for many years his splendid work in paleontology.—*Nature.*

AMENDMENTS TO THE INTERNATIONAL RULES OF ZOOLOGICAL NOMENCLATURE

UPON unanimous recommendation by the International Commission on Zoological Nomenclature, the International Zoological Congress, which met at Budapest, Hungary, September 4–9, 1927, adopted a very important amendment to Article 25 (Law of Priority) which makes this Article, as amended, read as follows (*italicized type represents the amendment;* Roman type represents the old wording):

Article 25.—The valid name of a genus or species can be only that name under which it was first designated on the condition:

(a) That (*prior to January 1, 1931*) this name was published and accompanied by an indication, or a definition, or a description; and

(b) That the author has applied the principles of binary nomenclature.

(c) *But no generic name nor specific name, published after December 31, 1930, shall have any status of availability (hence also of validity) under the Rules, unless and until it is published either*

(1) *with a summary of characters (seu diagnosis; seu definition; seu condensed description) which differentiate or distinguish the genus or the species from other genera or species;*

(2) *or with a definite bibliographic reference to such summary of characters (seu diagnosis; seu definition; seu condensed description). And further*

(3) *in the case of a generic name, with the definite unambiguous designation of the type species (seu genotype; seu autogenotype; seu orthotype).*

The purpose of this amendment is to inhibit two of the most important factors which heretofore have produced confusion in scientific names. The date, January 1, 1931, was selected (instead of making the amendment immediately effective) in order to give authors ample opportunity to accommodate themselves to the new rule.

The commission unanimously adopted the following resolution:

(a) It is requested that an author who publishes a name as new shall definitely state that it is new, that this be stated in only one (*i.e.,* in the first) publication, and that the date of publication be not added to the name in its first publication.

(b) It is requested that an author who *quotes* a generic name, or a specific name, or a subspecific name,