Some time ago an opportunity presented which enabled me to time the wheeling of a small bird flock with considerable precision. As I drove along a Vermont hilltop road at 35 miles per hour, the speed noted by chance just at the right time, a flock of something under half a hundred birds flew parallel to me not over fifteen feet from the car window and at precisely my speed. After a few seconds of this the flock wheeled away—not columns left, but each individual left face. I could not detect the slightest shift of position of one individual relative to the group. Surely none continued forward anything like its own length, perhaps 9 inches, after the others had turned.

Flying at 35 miles per hour, a bird lagging only ten milliseconds behind its fellows would have shot six inches ahead before making the turn. Clearly all the birds swerved simultaneously, within a maximum variation of less than five milliseconds.

What the cue or signal was which initiated the group maneuver, I do not know. No leader moved first and was followed by the others—I could not have failed to see the sequence. And any optic or even auditory stimulus, with a probable minimal reaction time of at least 100 milliseconds, must have acted with extreme constancy on the separate individuals. Even the Rockettes, elaborately trained to pretimed movements, can not approach such precision.

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SCHOOLCRAFT AND THE AMERICAN ETHNOLOGICAL SOCIETY

IN recent issues of SCIENCE, there are some interesting articles about the American Ethnological Society in which Albert Gallatin has been mentioned as its founder. The centennial of this organization seems a proper time to consider the suggestion that Schoolcraft should be given at least joint credit for its establishment.

Schoolcraft had a genius for the construction of vehicles for scholarly activity, first manifested at the age of sixteen at Guilderland, N. Y., and afterwards wherever he went.

The last words in his first book, published in New York City in 1819, emphasized the need of a society for the study of antiquities in the United States ("A View of the Lead Mines of Missouri," p. 294).

In the spring of 1825, again while visiting in New York City, he, with Mr. Conant and Mr. Dwight, definitely arranged for a magazine devoted to Indian subjects, with Wilder and Campbell, publishers ("Memoirs," p. 207).

Disappointed in this, in December of the same year, at Sault Ste. Marie, Mich., Schoolcraft began a literary-ethnological magazine of his own, in manuscript, which circulated not only in that military outpost but considerably in the East as well.

In 1832, in Detroit, he organized the ethnological-humanitarian Algic Society, whose activities centered wherever he went and did not survive his interest.

Credit for establishment of the first common school journal in the United States, published in Michigan, 1838–1839, was originally given to John D. Pierce, then state superintendent of public instruction. It has now been shown that the launching influence in this was Schoolcraft, whose committee chose Mr. Pierce for editor and publisher because of the prestige of the latter's position as well as his ability.

The great Lewis Cass for years has been proudly claimed as founder of the Historical Society of Michigan. Now it has been made clear that, although deeply interested in scholarly matters, Governor Cass manifested no organizational urge for the better part of two decades of residence in Michigan; but that the Historical Society of Michigan sprang into being within a few weeks after Schoolcraft arrived in Detroit, in 1828, as a member of the Territorial Legislative Council. Schoolcraft secured for the organization its state charter and the potent name of Cass for its first president; and made all members of the legislative council members *ex officio* in order to give the society official countenance and secure a place of meeting for it.

Late in 1841 Schoolcraft left Michigan for New York City. The middle months of 1842 he spent in Europe, where he contacted and was particularly interested in scholarly organizations (manuscript paper, "Scientific Associations Abroad," in files of New-York Historical Society). On his return from Europe in 1842 he settled in New York City. Immediately the American Ethnological Society was founded—in November of that year.

The distinguished Albert Gallatin had been in New York City since 1828.

A contemporary biographical sketch of Schoolcraft, published unquestionably with his approval, says that "in 1841 he removed his residence from Michilimackinack to the city of New York, where he was instrumental, with Mr. John R. Bartlett, Mr. H. C. Murphy, Mr. Folsom and other ethnologists, in forming the American Ethnological Society—which, under the auspices of the late Mr. Albert Gallatin, has produced efficient labors" ("Memoirs," xlv).

It would appear that, in the case of the American Ethnological Society as so often, Schoolcraft again had hitched his vehicle for scholarship to a starry

[5] W. C. Allee, "Animal Aggregations," University of Chicago Press, 1931.

individuality, thereby conspicuously advancing scientific interests but obscuring his own all-important part in the procedure.

Full consideration might find it just henceforth to give Schoolcraft at least joint credit with Gallatin for the foundation of the American Ethnological Society.

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SPECIAL CORRESPONDENCE

WOUND HEALING

DR. S. PILIPCHUK, executive secretary of the Moscow Soviet Scientists Anti-Fascist Committee, has sent to SCIENCE the following communications by wireless from Moscow.

HEALING WOUNDS BY SKIN TRANSPLANTATION

Wound healing by the method of transplanting tissues evolved by Academician Filatov and his school is now widely practised. Particular attention has been attracted by the work of Professor Krause (Saratov) who has applied dead tissues chemically treated with chloraclyde in the healing of fresh and granulated wounds and chronic ulcers. Experience has shown that transplanted chloraclyde-treated tissues have the same, and in some cases even better, curative action. For grafting, Professor Krause has suggested using preserved skin from dead bodies and later chemically treated animal tissues, while his assistant Levkov uses the pericarpoidal [pericardial?] membrane treated the same way.

Hundreds of transplantations made in the Saratov Hospital on chronically non-healing ulcers, fistulas, burns, frostbite, skin diseases and in corneal lesions yielded excellent results in practically all instances. Surgical Clinic Pikin, candidate for the degree of doctor of medical sciences, has applied Professor Krause's method, using chemically treated pericarpoidal [?] skin from corpses and animal abdominal tissues. Careful preparation of transplanted skin is of the utmost importance. After being sprayed with chloraclyde solution the wound is drained, then sprayed again with chloraclyde. A piece of skin of the same form and shape as the wound, but slightly smaller than its surface area, is laid on the wound and fixed by several ligatures. This is covered by dry aseptic dressings. Pain in patched wounds ceases in from one to three hours after transplanting the skin. Healing takes less time under the grafted skin than in ordinary aseptic treatment. The bandage remains dry, and the scar remaining when the healing process is complete is small, soft and mobile.—N. EGOROV.

STIMULATION OF WOUND HEALING

Professor Goldberg, who holds the chair of pathological physiology in the Tomsk Medical Institute, suggests embryonal emulsion in the form of a liquid ointment made on a castor oil base for stimulation of the healing processes in wounds. Embryos are taken from guinea pigs, divided with scissors, and carefully ground with a small quantity of sterilized castor oil. Zeroform is added in the ratio of 0.3 parts to every 100 cc of oil. Tests made with this ointment on trophic ulcers in the Tomsk surgical clinics and hospitals prove that during the second phase of wound healing, and also when the process is sluggish, when granulation is either absent or poorly developed and there is sluggish regeneration of epithelium, this ointment has definite beneficial effect. This is frequently apparent after one or two dressings. It has an unquestionable stimulating influence on the regeneration of epithelium.—N. EGOROV.

MESSAGE RECEIVED BY THE AMERICAN ASSOCIATION OF SCIENTIFIC WORKERS FROM THE SOVIET SCIENTISTS ANTIFASCIST COMMITTEE

WE have received your letter of greetings through Professor Propper-Grastchenkov. Your proposal to establish closer contact between American and Russian scientists has met with greatest approval among Soviet men of science.

Soviet scientists are struggling for freedom and independence of all nations and for preservation of science and culture. . . .

In the struggle being waged by the democratic countries against fascist reaction science and technique play an important part. Soviet scientists spare no efforts in helping the Red Army to hasten the complete defeat of Hitlerism.

Several conferences were held in our country recently at which the work of scientists in wartime was discussed and plans for new efforts outlined. At the Jubilee Session of the Academy of Sciences of the USSR, convened in November, the results of scientific endeavor during the quarter century of Soviet power and the work of scientists in the war against Hitlerism were reviewed. Some time later there was a joint plenum of the medical councils of the People's Commissariat for Health of the USSR and of the Commissariat for Health of the RSFSR. The session of the Lenin All-Union Academy of Agricultural Sciences met in December.

At all these conferences a summary of what was done in each respective field of science was discussed and plans for further work in the war effort drawn up.

We believe that the exchange of reports on the