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BIOGRAPHICAL MEMOIR  
OF  
JESSE WALTER FEWKES  
1850-1930

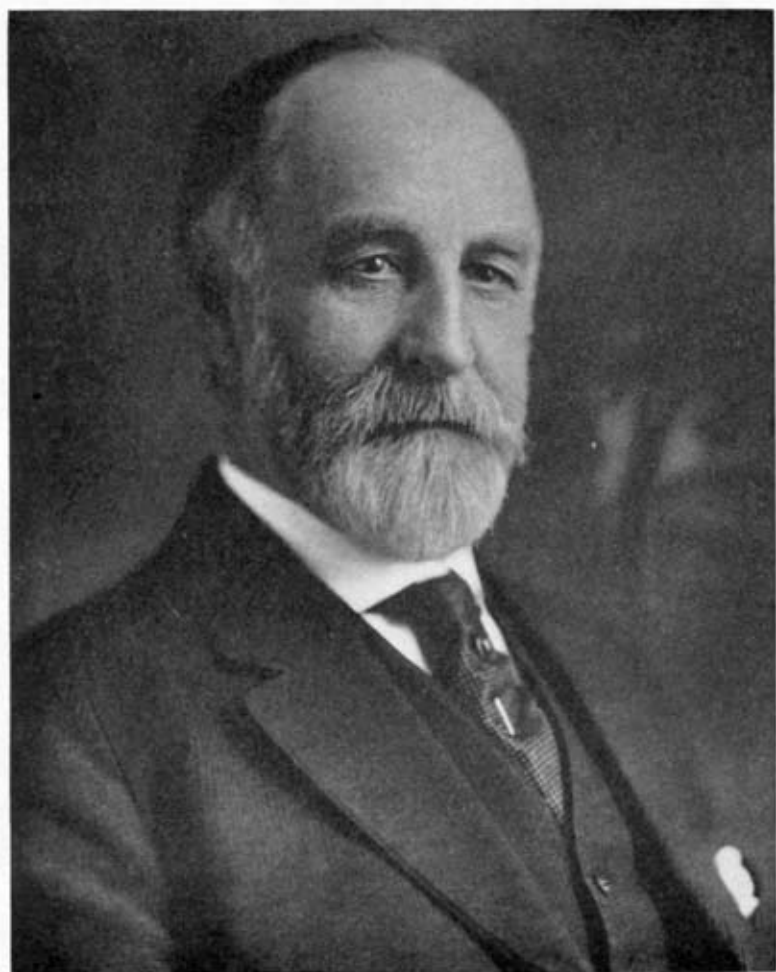
BY  
WALTER HOUGH

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J. Walter Fewkes

## JESSE WALTER FEWKES

1850-1930

Jesse Walter Fewkes was born at Newton, Massachusetts, November 14, 1850, son of Jesse and Susan Emeline (Jewett) Fewkes. Both his parents were born at Ipswich, Massachusetts. His mother's ancestry traced to the close of the 17th century in America. The primary educational opportunities of the period were given the boy with the long view that he should have an advanced education.

The resources of the intellectual environment of Jesse Walter Fewkes at the period of 1850 were particularly rich in men and reasonably so as to material agencies. His family means, limited to the income of his father as a craftsman, were budgeted unalterably as to the item of education, reflecting the early American belief in this essential feature.

Thus the youth, Jesse, entered into the ways of learning through the primary schools and grades locally organized. There is no data giving a glimpse at his progress and capabilities in this formative period, only that a clergyman became interested in his education. Through this interest Fewkes was prepared for Harvard, and at 21 he entered the college without conditions.

His course in the school may be marked by two periods, in which he essayed to find his particular bent that would develop into a life work. In the branch of physics we find him leaning toward the advancing field of electrical science under that department at Harvard. The second and dominating branch of science in which Dr. Fewkes worked for many years was marine zoology. At the Agassiz school at Penikese Island, under the inspiration of the great teacher, he laid the foundation for his work on marine zoology.

Agassiz had the European attitude toward science and the art to give examples. This attitude considered learning as scarcely secondary to religion, a matter for intense propagation. It demanded a serious regimen, a devoted search for the truth, and the implanting of the same spirit in the consciousness of others. This explains the teacher Agassiz.

Pursuing this science Fewkes studied zoology at Leipzig, Germany, during the four years subsequent to his graduation at Harvard in 1875. As a student under the Harris fellowship he also spent a period of work in marine zoology at Villa Franca and Naples.

Returning to the United States, Dr. Fewkes was appointed assistant in the Museum of Comparative Zoology at Harvard. Here he spent nine years in charge of the lower invertebrates.

Dr. Fewkes' life work was divided into two periods of scientific pursuits, that of marine zoology and that of ethnology. The extent and seriousness of Dr. Fewkes' work in natural history may be seen in his extensive bibliography on marine animals, numbering 69 titles.

Dr. Fewkes' attainments as a marine biologist were of a high order and brought prompt recognition from students in all countries where this branch of science was pursued. He was chosen to write the articles Coelenterata, Discophora, Siphonophora, Ctenophora, and Actinozoa for the Kingsley Standard Natural History, Boston, 1885. Much of his time was given to the study of the Medusae. The phenomena of the formation of coral islands were investigated by him at a time when this subject began to attract the attention of scientific men. In the minute and painstaking work of describing the various forms of marine life he was proficient. His drawings of the anatomy of medusa and coelenterates attained the height of skill.

This second period is marked by the episode of Dr. Fewkes' entrance into the field of anthropology, which began on an excursion to the Pacific coast on the Santa Fe Railroad. Along the route in New Mexico and Arizona he saw numerous members of the peaceful Pueblo Indians who are not less attractive than their terraced communal villages.

The Southwest, a region ear-marked for exploration by Major J. W. Powell in 1868, presented a vast field for archeological and ethnological investigation, and had already claimed the work of Holmes, Stevenson, Mindeleff, Cushing, and others who may be acclaimed as the pioneers. The locating and surveying of archeological sites comprised the efforts of most of these early

workers. Mindeleff studied the architecture, ancient and modern, of the Pueblos, and Cushing confined himself to an intimate study in residence of the Zuni tribe.

At this period Mary Hemenway of Boston was interested in setting on foot researches in the Pueblo region, and Frank Hamilton Cushing was chosen to carry on the work. At the close of Mr. Cushing's brilliant studies, during which he suffered much in health, Dr. Fewkes, fresh from his travels in the west, was appointed leader of the Hemenway Expedition.

Cushing had confined his intensive investigations to the Zuni Indians of New Mexico. With these Indians also Fewkes took up the work of the Hemenway Expedition and published several papers on Zuni music and ceremonials. Later he transferred his headquarters to the Hopi Indians living on the isolated mesas of northeastern Arizona. The study of the Hopi comprised a good part of Fewkes' contributions to ethnology. His affection for the Hopi was profound.

From the beginning of his acquaintance with the Hopi Indians, Dr. Fewkes saw the importance of the record of the striking calendric ceremonies of this tribe. Evidently these ceremonies had come down from early times, and at the period of Fewkes' coming had been little modified. In this study Fewkes observed and recorded in detail, often at great sacrifice of personal comfort, all the rites of the ceremonial year, a body of scientific knowledge of inestimable value.

Interpretation of the archeological finds made during these explorations in the southwest was naturally a difficult problem. Confronted with this crux, Dr. Fewkes turned to the existing Pueblo Indians of the region to ascertain whether in the survivals of their social life there would be material to elucidate the subject. This lead proved most fertile. Due to the conservatism of religious practices Dr. Fewkes found abundant means of explaining the past by the present.

Particularly fortunate was the survival in isolation in the desert of the Hopi Indians, practically at the primitive stage at the beginning of Dr. Fewkes' researches. Study of the lore of these Indians gave Dr. Fewkes confidence in referring prob-

lems coming up in his explorations to the body of Hopi traditions and survivals of art and customs.

An example of the application of the natural history method is concerned with the artifacts resulting from the exploration of Sikyatki in 1895, during which hundreds of pieces of decorated pottery were excavated. Applying the interpretation of the art motives used in the decoration of ancient Hopi religious paraphernalia given him by the priests, Dr. Fewkes was able for the first time to fix the meaning of the Sikyatki symbolic designs. The sound indoctrination of Agassiz appears here. Gradually Fewkes' idea of the use of the Hopi complex as a source by which antiquity could be interpreted appealed to the common sense of scholars. It is felt that this major contribution of Dr. Fewkes will finally meet with general agreement.

### RESEARCHES

Confining his work for several years to the Pueblo field, Dr. Fewkes on his entrance into the Bureau of American Ethnology broadened his inquiries to include regions that might yield data bearing on Pueblo culture. Important field work was undertaken on the Gulf coast of Mexico, the region of the first contact of the Spanish and containing possibilities of cultural contacts with tribes of the southern United States.

On his coming as ethnologist to the Bureau of American Ethnology in 1895, Fewkes continued his researches in the southwest. This was his most fruitful period, continuing to 1918, when he was appointed chief of the Bureau of American Ethnology. During the period of added administrative work he still found time to carry on field explorations. Even while visibly failing he completed a last work, the exploration of Elden Pueblo, an ancient site near Flagstaff, Arizona.

West Indian archeology and its relation, if any, to the cultures of the southern United States and to South America, respectively, was regarded by Dr. Fewkes as an important problem to be investigated. Dr. Fewkes' work in Porto Rico was published in a notable monograph regarded as a permanent con-

tribution to the subject. The West Indian researches were correlated with the work carried on by Dr. Fewkes in other islands of the group.

Returning to his favorite Pueblo field, Dr. Fewkes brought to a consummation his most valuable contribution to Pueblo archeology. Dr. Fewkes' idea was to contribute to the educational aspect of the ancient ruins by preparing them for study by carefully excavating the site and preserving and rendering them accessible to the public.

The traditions of the Hopi clans contained many allusions to the place of origin of the groups entering into the tribal complex. Dr. Fewkes found that there were clans from the north with animal totems, and clans from the south with nature totems, and clans from the east with totems of both classes. The traditions of the southern clans were more detailed and showed later data than from those of other quarters. Several years were spent by Dr. Fewkes in investigating the settlements of the clans named by informants. This quest led to explorations in the Little Colorado Valley along the river and south to the White Mountains, the ruins all showing pottery of the polychrome type and cream color, buff, and orange paste present. The study of clan origins was facilitated by the survival of a knowledge of the clan right to eagles in sites previously occupied by the Indians.

Continuing the work on the Little Colorado Valley, Dr. Fewkes penetrated to the upper Gila, a region marked by adobe villages, and also into the Red Rock country south of Flagstaff, where the Hopi still go for various needed products, such as roasted agave and bark for tanning or coloring buckskin.

In carrying out the work mentioned above of preserving ruins as assets of the educational system of the nation, Dr. Fewkes undertook the restoration and repair of Casa Grande in southern Arizona. This ruin, one of a number in the Salt River Valley, was seen as an extensive low mound of crumbled earth in which stands the remains of a massive adobe building known as Casa Grande, a landmark mentioned by early travelers in this region. Casa Grande was evidently the principal building

of an ancient city of low mud houses, the whole surrounded by a mud wall, forming a compound of great extent. Dr. Fewkes freed the base of this building from accumulated debris and placed over it a roof for protection against washing rains. A sufficient portion of the great compound was cleared to show the character of the architecture and arrangement of the cell units of the ancient city and the mud walls sealed over with cement. Through Dr. Fewkes' labors this monument is preserved for the enlightenment of thousands of visitors yearly.

Mesa Verde in Colorado is one of the most striking and valuable examples of Dr. Fewkes' idea of the preservation of ruins. Mesa Verde was the scene of the flowering of Cliff Dweller life. The remains here, both of open-air pueblos on the mesa and in the walls of the canyons, represent the Great Period of Pueblo culture. The region was high and inaccessible, but relic hunters before 1890 had done much damage. On the taking over of Mesa Verde by the Government as a national monument the National Park Service arranged with the Smithsonian Institution to have Dr. Fewkes carry on explorations and to preserve the ruins. This project took several years and gave a permanence and intelligibility to the Mesa Verde that is appreciated by the thousands who visit them yearly.

Among the many archeological fields in which Fewkes worked, the culture of the Mimbres Valley, New Mexico, proved to be important. Dr. Fewkes was pioneer in the investigation of the Mimbres' culture characterized by ceramics of unusual decoration in natural forms, described in several publications.

Summing up Fewkes' ethnological work among the Hopi it is seen that he provided a key by which could be interpreted the complex archeological remains of the ancient inhabitants of the southwest. Especially as to religious structures and symbolism is this applicable in the southwest.

By exploring type ruins in various parts of the southwest he contributed much of value to archeology. His methods, though not equivalent to the stricter regimen of present-day archeology, were adequate to the means and needs of the period. Especially in the collection and preservation of objects of material



culture he was preeminent. About sixty per cent of the material from the southwest now in the United States National Museum was collected by Fewkes. Important collections from the West Indies and Mexico were amassed by his efforts.

Another contribution was his method of preservation and repair of key ruins, an idea working toward economic and educational values. Still another contribution was his successful effort to induce the Government to set aside certain areas containing ruins as national monuments. Several of these reserves were established through his efforts.

Dr. Fewkes received many honors from learned societies and other bodies. He was made Knight of the Royal Order of Isabella la Catholica in recognition of his distinguished services at the Columbian Historical Exhibition at Madrid in 1892. From King Oscar of Sweden he received a gold medal "Literis et Artibus" for his discoveries in anthropology. He was a fellow of the American Academy of Arts and Sciences, member of the National Academy of Sciences, and officer or member of many scientific organizations. He received the degree of LL. D. for services in anthropology from the University of Arizona in 1915.

Dr. Fewkes was a likable, friendly man. Of above average height, well fleshed, sandy to reddish hair and beard, blue eyes, florid complexion, he was a personable man. He delighted to communicate his knowledge to all and common.

It was an experience of enduring memory to camp with Dr. Fewkes in the fascinating southwest. Under his leadership the glamor of the pursuit of the unknown filled the mind with pleasing pictures of new contributions to a young science. Each morning, after a night's sleep under the stars, everyone in the party returned vigorously to the work of excavation.

He married Florence George Eastman, who died in 1888, and again was married to Harriet Olivia Cutler, whose death preceded his by a few weeks.

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