AN EXPERIMENT IN HUMAN STIRPICULTURE.

BY ANITA NEWCOMB MCGEE.

"Stirpiculture: the breeding of special stocks or races," is Webster's definition. The breeding of animal stocks is familiar to all of us, but human stirpiculture is so nearly unknown that even its possibility has been denied. Whether this be true under ordinary social conditions remains yet to be seen, but I wish to lay before you proof that it is not wholly unattainable in our own time and land. A systematic and carefully executed experiment in human stirpiculture was made at the Oneida Community, in central New York, from 1868 to 1879. To explain how this came to pass requires some account of the man who planned the experiment and of the path which led to its inception and partial consummation.

John Humphrey Noyes was born in southern Vermont in 1811. Of strongly religious inheritance and training, he was also possessed of a logical and independent intellect. While a student of divinity at Yale, in 1834, he originated and preached certain doctrines not in accord with Congregational tenets, which caused his expulsion from that church. The most important of his distinctive teachings were that the second coming of Christ took place at the time of the destruction of Jerusalem, when the members of the primitive Christian church, whether living or dead, became immortal and formed a church in heaven, of which the church founded by Noyes was a continuation. Since that period "personal communication with Christ is a privilege of the gospel, and when this communication is perfected it will ensure salvation from sin, including disease and death."* In consequence of their desired freedom from sin, the adherents of these doctrines are called Perfectionists.

After the return of Noyes to Putney, Vermont, where several members of his family and a few other persons lived under his care, he slowly devised means for the growth and perpetuation of the new sect. A system of community of property among those believers

*American Communities, by William Alfred Hinds, Oneida, N. Y., p. 125, 1878.
who were able to live and work together, seemed best adapted to the end in view. Noyes, however, clearly saw the inevitable conflict between that new unit, the community, and the old unit, the family. He himself says on this subject: "Love in the exclusive form has jealousy for its complement, and jealousy brings on strife and division. Association, therefore, if it retains one-love exclusiveness, contains the seeds of dissolution, and those seeds will be hastened to their harvest by the warmth of associate life."*

Prophetic words! For Noyes made the mistake of his life when he concluded that man is not naturally monogamous. He argued from the Bible that in the kingdom of heaven there is no marriage, since marriage is like slavery—a form of selfish personal ownership; and to overcome this selfishness among Perfectionists, Noyes devised an extraordinary system of regulated promiscuity, beginning at earliest puberty, and by a method of his own invention he separated the amative from the propagative functions.† By this community of possession and of person he sought to root selfishness forever from the hearts of his disciples.

The first feature was practiced on a small scale from 1841; the second—"complex marriage"—was inaugurated in 1846; but the other inhabitants of the New England village refused to view matters in a lenient light, and they showed their sentiments in no uncertain manner.

Having left their home in consequence of this, the growing sect established itself, in 1848, with some of Noyes' adherents who lived near Oneida, N. Y. At the close of this year the Oneida Community included 87 persons. The succeeding year it doubled its numbers. Financial success was of course its first necessity, and twenty years of hard labor and earnest effort brought prosperity. The membership during this time was carefully limited, so that in 1869 it had increased only to about 250.

Previous to this date it was deemed desirable, for financial and other reasons, to restrict the birth-rate also. New members, of course, brought their children with them, but only two or three

†See Male Continence, by John Humphrey Noyes, Oneida, N. Y., 1872, and article on A Gynecological Study of the Oneida Community, by Ely Van de Warker, M. D., in the American Journal of Obstetrics and Diseases of Women and Children for August, 1884.
were born in the community each year. So well under control was this matter that only about one birth in eighteen months was accidental. The remaining births were from mothers who, for personal reasons, had obtained permission to increase the population of the community.

Now all this time Noyes was the leader and the undisputed head, who, by his personal power and attraction, had drawn together and kept together this group of people; but the great object of his creed, namely, salvation from sin, disease, and death, could not wholly be accomplished in one lifetime. Therefore, the immediate necessities being obtained, it was to the future and to the next generation that Noyes now turned his attention. It was a self-evident matter to him that for the attainment of his object each generation must surpass the preceding one in holiness, and to accomplish this he devised the method of stirpiculture practiced by the community.

Its first principle, founded on stock-raising experience, was that of a judicious in-and-in breeding, with occasional mingling of foreign blood.

This idea was fully presented in an "Essay on scientific propagation" by John Humphrey Noyes, in 1870. Here the argument is fortified by a genealogy of Abraham and his descendants, showing the frequent mating of cousins, of brother and sister, of father and daughter, or of uncle and niece, in only half a dozen generations. Noyes also establishes that, to the breeder, uncle and niece are as much related as father and daughter, because brothers have identical blood; and also that "cousins, having each 50 per cent of the blood of brothers—i.e., of the same blood—are in the same relation to each other as that of half-brothers." Since the stirpicultural experiment only produced one generation, this principle had but a limited application. In practice, nevertheless, such near relations as uncle and niece were twice paired; and it was further carried out in that a considerable proportion of the children have Noyes blood on one or both sides. The founder himself had eight children after he was fifty-eight years old, and among his adult relations in the community were his brother, his two sisters and their children, with his own son, born before the community began.

The second principle enunciated was that of careful selection of individuals for breeding purposes. Genealogies were studied and medical histories compiled. A committee, headed by Noyes, took charge of the matter, and selected the holiest members who were
free from physical defects. Intellectual and other considerations were given less weight, though in the later years physique and intellect were given their due place. The parents were of all ages, averaging as under ordinary circumstances, but the father was always older than the mother.

One essential consideration was quite noteworthy. This was the mutual attraction which must exist to at least a slight degree between persons mated. Again, it sometimes happened that a proposition would come from the individuals concerned, and if no objections were found such requests were granted.

The children born of this experiment between 1869 and 1879, inclusive, were sixty in number. Of these, five died at or near birth from unforeseen causes depending on the mother. The remaining fifty-five were brought up with the greatest care and under the best conditions until 1880, at which time they were from a few months to eleven years of age. The infants were cared for exclusively by their mothers until about nine months of age, and were nursed by them whenever possible; from then until eighteen months old the mother had charge at night only, while after that age her individual responsibility for the child ceased. The children’s department, whither it was now transferred, was managed by those persons who had shown themselves best fitted for the work, and was in a house apart from the large community building.

In 1878 a “Report on the health of children in the Oneida Community” was published by Dr. Theodore R. Noyes, son of the founder. In this it was stated that serious sickness was unknown, and that the mortality at birth and to nine years was less than one-third that of the United States at large as given in the census of 1870. This difference is, however, partly due to the excellent sanitation, the protection from infection, and the other favorable post-natal conditions. The same may be said of the table comparing weight and height of these children with those of the Boston schools. Of nineteen of the former, then five to nine years old, all but one exceeded the Boston averages in height, and all but four in weight also. The weak member of this group was a boy who was deficient in coördinating power over his muscles, and was the one marked failure of the experiment. A noteworthy feature in the results was the excess of males, there being thirteen boys, but only six girls, within the ages mentioned. No explanation of this remarkable variation from the averages of New York State has been offered.
Doctor Noyes, in his "Report," draws the following conclusions: "First, a little common sense applied to the mating of men and women for propagation must largely increase the proportion of viable children born; second, a viable child, once past the perils due to its mother, is nearly sure to grow up free from checks to its growth under sanitary conditions as good as those now prevailing in the community." It is evident that pre-natal culture did not lesson the need of post-natal care, for the experimenters knew that the eyes of the world were upon them, and, moreover, they believed that the future of the community rested with them.

But alas! "The best-laid plans o' mice an' men, gang aft' aglee."

Stirpiculture was planned to insure the future of the church and the community: stirpiculture destroyed both.

Complex marriage, practiced by earnest, hard-working people, had held its own for twenty years. Selfish love—the loving of one person instead of the whole group—had been condemned and suppressed in every way, and so long as promiscuity was enforced the effort was successful.

But now one-fourth of the adult communists had been living in pairs for weeks or months, and these pairs had children; and there arose the unexpected issue—the Spirit of Monogamy—which now grew and spread until the whole body was infected with it. Success and leisure gave time for expressions of dissatisfaction; a discordant element found its way into the community; the old solidarity was gone, and each desired a mate.

Noyes himself was weighed down with advancing years and deafness, and seeing before him the failure of all his hopes he retired from the community.

It so happened that at this very juncture, in the summer of 1879, the clergymen of New York State became aware that an unusual, and from their point of view scandalous and immoral, social condition existed openly in their midst. They held meetings and appointed committees; but their crusade was prematurely cut short by the action of the communists. On August 26, 1879, the Oneida Community was assembled to consider a message from its founder, proposing that, "in deference to public sentiment," complex marriage should be renounced and ordinary marriage or celibacy substituted. A full vote was polled, and only three members opposed the proposition. This unanimity of opinion shows the state of feeling among the communists, to whom the threatened legislation against them was only the last in the series of events which led to the momentous
change. Those who had been married before entering the com-
munity, twenty-five couples in all, were again husband and wife, and
twenty marriages between individuals not previously wedded took
place within four months after the abandonment of the stirpicultural
experiment. At this time two hundred and ninety-nine persons
belonged to the community, comprising eighty-three children under
twenty years and two hundred and sixteen adults.

The next step in this history followed quickly and easily after the
returning wave of selfishness had swept community of person away.
By common consent community of goods was abandoned, and the
property and business were transferred to a joint-stock company,
chartered November 20, 1880. Certain coöperative features are,
however, retained by the seventy-five or one hundred persons who
continue to live in the old community building. Before the annual
dividends of the company are paid a sum is taken from the profits
for the support of each of the products of the stirpicultural exper-
iment until he reaches sixteen years of age. The company also sup-
ports a school for those who have not left the neighborhood.

Certain results of this experiment in human stirpiculture, probably
the most systematic and extensive of modern times and civilized
peoples, are displayed by the children born under its conditions.
In weighing the results it should be remembered that the status of
these children represents the product of two factors which cannot
be separated: 1st, stirpiculture proper—i.e., the selection of parents;
and, 2d, community care and training of the young. This blend-
ing of causes was clearly recognized by Doctor Noyes. As he states
it in the report above referred to: "The abolition of natural selec-
tion, by doing away with the vicissitudes which the strong alone
can survive in childhood, must certainly lower the tone of adult
health, unless artificial selection takes its place." In point of fact
this artificial selection was so successful that the only death which
has occurred among the children of stirpiculture since 1880 was
that of a boy, reared in spite of weakness, who succumbed to a
trifling malady at about sixteen years of age.

Speaking only of the older children, now twenty-two years old
and under, the pride taken by the experimenters in their offspring
is certainly warranted. The boys are tall—several over six feet,—
broad-shouldered, and finely proportioned; the girls are robust and
well built. The present occupations of the older youths are inter-
esting in connection with the fact that, with the exception of the
Noyes family and half a dozen lawyers, doctors, and clergymen, the
Oneida Community was composed of farmers and mechanics, and that the mothers generally belonged to the classes employed in manual labor. Of the oldest sixteen boys, ten are in business, chiefly employed as clerks, foremen, etc., in the manufactories of the joint-stock company. The eleventh is a musician of repute; another a medical student; one has passed through college and is studying law; one is a college senior, and one is entering college after winning state and local scholarships. This young man is considered by all as a student of remarkable ability and great mathematical promise. Finally, the sixteenth boy is a mechanic, the only one engaged in manual labor. Of the six girls between eighteen and twenty-two years, three are especially intellectual. One is at a female college, another is entering college with Greek as a specialty, and the last is a student of the kindergarten system. It is also interesting to observe that the fathers (including Noyes himself) were as a rule the intellectual superiors of their mates, and inquiry develops the fact, known in the community, that in these cases the children are markedly superior to the maternal stock.

As an index of the calibre of the offspring of stirpiculture it may be mentioned that favorite amusement is found in a debating society of three girls and four of the boys, which meets during the summer when all are at home.

It is a surprise to find that little interest is taken by these young people in the peculiar circumstances of their origin, and that in spite of their early doctrinal training only a very few are church members and but one is a Perfectionist. This one is the son of an uncle and niece, both of Noyes blood. Thus the main object of the experiment in stirpiculture, namely the perpetuation of the church through these children, is a complete failure.

This would seem to indicate that while our race would doubtless be greatly benefited by more attention to laws of breeding, yet to attempt promulgation of a belief by this means alone is only to court defeat. In spite of the energy and magnetism of so remarkable a man as Noyes, in spite of his long-continued efforts, and just when success seemed within his grasp, his one misjudgment of human nature bore fruit—the neglected instinct of monogamy arose in its might and crushed to nothing the whole structure; and he, the builder, went last of all. With the close of his life, April 13, 1886, ended a unique and instructive history.
A Chinese Irrigating Wheel.—A model of a very interesting irrigating wheel was recently sent to the U. S. National Museum from Kiung-chow, China, by Dr. Julius Neumann. The wheel is a light open construction having a broad tire, to the inner side of which are attached at intervals bamboo buckets slanting at an angle of 45° with the axis of the wheel. As the wheel turns in water the lower buckets are filled while the buckets in the opposite arc are discharging into a trough, the water having been raised to a height equal to the diameter of the wheel.

This simple, ingenious, and effective contrivance reflects great credit upon the inventive powers of the Chinese.

It is superior to the ancient tympanum, which was a wheel having curved tubes discharging through the axis, thus raising the water only a radius. The more modern tympana were supplied with paddles, and thus were moved by the current.

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The device described above was not at all uncommon in Nevada and California ten years ago, where it was probably introduced by Chinese immigrants.—EDITOR.

A Fire-Making Machine.—A machine which combines the parts of the ordinary two-stick fire drill was seen in use some years ago among the people of the Nile, above the second cataract, by Dr. F. H. Hoadley.

The upright stick, bearing a cog-wheel on its upper end, was fixed in a frame and geared to a larger cog-wheel turned by a crank. By this simple device the labor and probability of failure in making fire were much decreased. The machine appears to have been an application of the irrigating devices in use along the Nile.

It seems strange that, considering the universal use of wood friction to procure fire, there have been so few improvements on the primitive tools. These improvements are comprised in two inventions, viz., the bow drill and the pump drill, which are not to be ranked as machines, but rather as machine tools.

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