

MULTIPLE BIRTHS AMONG THE CHINESE

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INTRODUCTION

The Chinese Annals contain not only records of human events, but also of unusual natural phenomena which left a deep impression upon the minds of the contemporaries. In the early days of historiography, when occurrences were chronicled day by day and year by year, the two categories of human and natural events were noted indiscriminately, merely in the chronological succession as they happened. In the introduction to the Shu king we read, for instance, "The king's uncle, the prince of Tang, found a head of grain, two stalks in different plots of ground growing into one ear, and presented it to the king." In the Bamboo Annals (*Chu shu ki nien*) this feature is still more conspicuous: solar eclipses, meteoric falls, earthquakes, droughts, extraordinary phenomena in the growth of trees, appearance of a fung-hwang (so-called phoenix), rain of particles of earth, unusual thunderstorms, and other phenomena are there on record, being interspersed with the record of imperial and military affairs. Beginning from the Annals of the Former Han Dynasty (*Ts'ien Han shu*), a novel departure from the old practice was instituted in as much as the natural events were detached from the general narrative to be relegated to a special section, entitled "Records relating to the Five Elements" (*Wu hing chi*). The majority of official annals has adopted this practice. These chapters contain most interesting information, not for the historian, but for the scientist, and therefore merit close study. They give detailed lists, with exact reference to date and place, of great catastrophes, such as famines, droughts, locust-pests, inundations, hail-storms, landslides, earthquakes, conflagrations, excessive cold, electric storms in the winter, etc., abnormal phenomena and monstrosities in domestic animals and human beings, cases of insanity, abnormal customs and practises, etc. It is to this department of records that we owe our principal information on a subject which has not yet been discussed,—the frequency of multiple births among the Chinese.

In ancient times, under the Chou dynasty, the officer presiding over the people (*se min*) was obliged to keep a register of the population. All individuals were recorded from the age when the teeth appear. A separate count was taken of males and females; every year, the number of births was added, while the number of dead was taken off the register (cf. E. Biot, *Le Tcheou-li*, Vol. II, p. 353). We cannot but regret that documents of this character have not survived. No allusion to twins or other plural births is made at that period.

The chapters *Wu hing chi* of the two Han Annals contain no records of multiple births. The *Wei shu* gives a single case of a quadruplet birth. Triplets, but only two cases, are first recorded in the Books of the Tang Dynasty, and there is a long list of them under the following Sung dynasty. There is one case of triplets of early date, not on record in the Annals, but in the *Sou shen ki*, written by Yü Pao in the early part of the fourth century, who reports that "in A.D. 243 there was a woman who gave birth to three sons." I have not embodied this case in my statistical review of the matter, as the work in question is a Taoist book of marvels, and as the extant edition presents merely a retrospective make-up (cf. Wylie, *Notes on Chinese Literature*, p. 192).

While triplet and quadruplet births are mentioned in the Annals with comparative frequency, they hardly trouble about twins, save a few cases of united twins. This omission may indicate one of two possibilities: either twin-births were too common to attract much attention, or were too rare to be worthy of notice. This alternative cannot be decided without a solid foundation of statistical material, which unfortunately we do not have. At the outset I am not disposed to assume, on a merely empirical basis, a high degree of fecundity of the Chinese woman or a relative frequency of twins; for it is a common experience of our time that personal opinions and impressions along this line are seldom, if ever, upheld by the results of statistical research. Restraint in this case is the more commendable, as in regard to twin-births in Annam we have the following observation of Dr. A.-T. Mondière ("Monographie de la femme annamite," *Mémoires de la Société d'anthropologie*, II, 1875, p. 474): "Les grossesses doubles sont excessivement rares chez la femme annamite. Sur les 153174 naissances que j'ai relevées sur les cahiers des villages de toute la Cochinchine de 1872 à 1877 inclus, je n'ai trouvé que 15 accouchements de jumeaux. Soit 1 sur 10211 naissances. De plus, un arrondissement particulier, celui de Bentré, semble avoir ce privilège,

car sur 15 accouchements gémellaires il en a 9 à lui seul, c'est-à-dire 60 pour 100. Les six autres arrondissements (sur 19) qui en ont présenté: Bien-hoà, Chau-Doc, Saigon, Soctrang, Tan-an, Tay-ninh, n'en ont eu chacun qu'un seul cas, en ces six années. D'après ce que les autorités cambodgiennes m'ont déclaré, les jumeaux seraient plus fréquents chez eux, et d'une façon assez sensible, mais ils n'ont pu me fournir de chiffre exact."

A real investigation of the problem in question is impossible for the present, as we lack any vital statistics for the Chinese Republic. Nevertheless I venture to hope that the facts and observations given below will be of some interest to anthropologists. In order to critically balance the data furnished by the Chinese Annals, it would be indispensable to have reliable birth statistics for China, to know the birth-rate for the different provinces, and to depend on good records showing the total number of plural births for at least a decade. In default of such material in the mother-country I anticipated to receive at least some data from those countries outside of China with a large Chinese population, although it must be taken into account that social and economic conditions of the Chinese abroad are different and that, above all, Chinese emigrants hardly ever take their families along, but intermarry, when settled, with women of other nationalities. I have not yet been able to obtain relevant statistics from the British, French and Dutch colonies; but what I have found thus far is not very encouraging. The Birth Statistics for the Registration Area of the United States for 1915 (Washington, 1917) give a total of 74 births (33 males and 41 females) among the Chinese for that year, but nought else.

According to a communication of Dr. William H. Davis, chief statistician in the Bureau of Census, Washington, D. C., there were, in the years 1915-17, 309 births among the Chinese in the registration area for births in the United States (California not being admitted to the registration area is not included), only one pair of twins appearing in this total. The State of California gives in its vital statistics only the number of births and deaths of its Chinese populace, without touching the question of plural births. In 1916 there were 425 births (compared with 727 cases of death); in 1917, 419 births (compared with 818 cases of death) among the Chinese of California (Twenty-Fifth Biennial Report of the State Board of Health of California for the Fiscal Years from July 1, 1916, to June 30, 1918, Sacramento, 1918, pp. 201, 203, 205, 207, 224). The statistics of Mexico contain merely

the number of Chinese living in the various provinces, the total, as taken in the third and last census of 1910, being 13,118 men and 85 women = 13,203 (Estados Unidos Mexicanos, *Boletín de la Dirección General de Estadística*, Num. 5, p. 37, Mexico, 1914), but no tables of births.

A literal translation of all cases of triplet and quadruplet births, as they are chronicled in the Annals, has been prepared by me. In every case, the exact date, the name of the family, the social status of the father, and the place where he lived are given; also the distribution of sex in each birth is indicated. As this material would be unintelligible without the use of Chinese characters, it is here omitted. Readers interested in this phase of the work may be referred to the *New China Review* of Shanghai, in which the complete article will be published. For some of the bibliographical references mentioned on the following pages I am under obligation to Dr. A. Hrdlička, Curator of Physical Anthropology in the U. S. National Museum of Washington.

UNITED TWINS

The Chinese Annals have preserved a few cases of twins grown together at birth. In this case, the question naturally is of twins produced from a single ovum.

In the fourth year of the period Kien-hing (A.D. 316), under the Emperor Min of the Tsin dynasty, a woman of the family Hu, when she was at the age of twenty-five, the wife of Jen Kiao, a minor official (clerk) in the district of Sin-ts'ai (prefecture of Ju-ning, Honan), gave birth to female twins grown together in the region of the abdomen and the heart, but separated above the breast and beneath the navel.—*Sung shu*, Ch. 34, p. 28.

In A.D. 487 (under the Emperor Wu of the Ts'i dynasty), the wife of Wu Hiu, one of the people of Tung-ts'ien in Wu-hing (now Hu-chou fu, Che-kiang) gave birth to male twins grown together below the chest down to above the navel.—*Nan Ts'i shu*, Ch. 19, p. 16b.

In the fourth month of the third year of the period Yi-fung (A.D. 678), King-chou (Kan-su) presented the Court with two infants the hearts of which were connected, but each with a separate body. Formerly it had happened that the wife, *née* Wu, of Hu Wan-nien, a soldier of the guard in the district Shun-ku (Kan-su), gave birth to twins, a male and a female, whose breasts were connected, but who, for the rest, had individual bodies; when separated, both died. At a subsequent birth it was thus again. The twins were boys, and were

brought up. In the above mentioned year they had reached the age of four years, and were presented to the Court.—*T'ang shu*, Ch. 36, p. 21.

In A.D. 1610, the wife of Li Yi-ch'en of Fan-ki (in Tai-chou, Shan-si), *née* Niu, brought forth two girls with their heads and faces grown together, but with separate arms and legs.—*Shan-si t'ung chi* ("Gazetteer of Shan-si Province").

Two Chinese twins grown together, born in 1887, were shown by Barnum and Bailey in 1902, and at that time were still unseparated and well. Cf. R. Virchow, Xiphodymie (*Z. Ethn.*, 1891, pp. 366-370).

The modern Gazetteers occasionally record the birth of twins, not, however, on account of any special interest attached to the fact itself, but merely in order to emphasize the interest in the vitality of twins (cf. W. A. Macnaughton, *The Longevity of Twins*, *Caledon. M. J.*, X, pp. 127-129, Glasgow, 1915). The following examples from the Gazetteer of Hwa-yang (*Hwa-yang hien chi*, Ch. 43, p. 4) will suffice to illustrate this feature.

The wife of Chu Ch'ang-hwa, *née* Lin, had 14 sons, among these 2 pairs of twins, who did not die prematurely, but are still alive.

The wife of Chung Se-kin, *née* Tsou, had 9 sons, among these one pair of twins still alive.

The wife of Chung Chao-k'in, *née* Chang, had 9 sons, among these one pair of twins still alive.

The wife of Li Ch'ao-kung, *née* Lin, had 8 sons, among these one pair of twins still alive.

TRIPLETS

Following is a summary of the Chinese data. For the period of the T'ang dynasty (A.D. 618-906) only two cases of a triplet birth are on record in the Annals. In A.D. 775 a woman of the family Chang gave birth to one male and two females, and in A.D. 905 triplets (males) were born by the wife of P'eng Wen, one of the people of Ju-yin in Ying-chou (Ngan-hwi or An-hwi Province). For the Sung period the data of triplet births are fuller than for any other dynasty. From A.D. 960 down to A.D. 1150 we have a total of 110 cases, listed with exact dates, family and place names, father's social status, and sex distribution in each triplet birth. For the time from A.D. 1023 to 1126 no list of names is given, but merely a statistical record which covers several reign-periods of emperors. It is here reproduced in tabular form.

RECORDS OF MULTIPLE BIRTHS IN CHINA, 1023-1126

Period	Years	Quadruplets (Males)	Quadruplets (3 Males, 1 Female)	Triplets (Males)	Triplets (2 Males, 1 Female)	Total
1023-68.....	46	2	—	44	1	47
1068-83.....	15	1	1	84	—	86
1084-99.....	16	2	—	18	1	21
1100-26.....	27	1	—	19	—	20
Total.....	104	6	1	165	2	174
		Quadruplets total 7		Triplets total 167		

While the preceding cases are not recorded in the way of vital statistics, but solely as unusual events, the above table conveys the impression of embracing a fairly accurate register of all multiple births (save twin births), which took place within the span of a century. The proportion of quadruplet to triplet births in this period is 1: 23.86. The total of triplet births on record during the Sung epoch, accordingly, is $110 + 167 = 277$. The total of quadruplet births during the same period is 7 (as shown by the above table) + 7 (recorded in the following section) = 14. The proportion of quadruplet to triplet births for the entire period of the Sung is 1:19.78; while the proportion for the entire period of Chinese history here considered (473-1643) is 1:10.8. This calculation is based on a total of 324 triplets and 30 quadruplets.

There are no multiple births on record in the chapter *Wu hing chi* of the *Kin shi*. The *Yüan shi* (Chs. 50-51), covering the period from 1260 to 1367, contains only 15 cases of triplets (all males), recorded under the years 1261, 1265, 1273, 1285, 1291, 1297, 1300, 1327, 1328, 1335, and 1363. In the years 1273, 1297, 1335, and 1363, two cases are listed for each year; and it is of especial interest that in two instances we have two cases of triplets in the same family, the interval between the two being in either case given as three years. According to Dr. Puech, to whom we owe excellent studies on the causes of multiple births, the more children a woman has had at close intervals, the more she will be inclined toward these physiological anomalies. Three women admitted in the St. Petersburg Midwives' Institute between 1845-59 in their fifteenth pregnancy had triplets, and each had triplets three times in succession (J. M. Duncan, *Fecundity*, p. 71).

For the period of the Ming dynasty (1368-1643) we lack official records; but the section *jen i* of the *T'u shu tsi ch'eng* gives a list of 30 cases of triplet births, extracted from the provincial and local Gazetteers, and covering a period from 1404 to 1626. In 1413, 1515, and

1520, two cases are recorded in each year. In view of the fact that this material is extracted from a number of scattered books, it cannot lay claim to completeness; the figure 30 is certainly much removed from reality, but even if multiplied by 3 or 4, it is left far behind the total of the Sung period. On the whole, the impression prevails that the number of multiple births has steadily been on the decrease from the days of the Sung. This would agree with an anthropological theory to the effect that the phenomenon of multiple births in man represents a survival of or reversal to his former animal state and that with the advance of civilization the number of such births is liable to decline. There is a correct biological viewpoint in this hypothesis, but it does not account for all facts connected with the phenomenon, and, above all, conflicts with given data and statistics. It is not brought out by the vital statistics of any European country that the frequency of plural births is on the decline; on the contrary, in France, for instance, it is surprisingly high (see below). Further, if that theory were correct, we should naturally anticipate to find the greatest number of multiple births among primitive tribes, which for all we know is not the case. Hardly a century has elapsed that records of plural births have been taken in Europe, and this period is too short to allow us to indulge in much speculation on the subject.

According to the Statutes of the Manchu Dynasty, it was decreed in 1663 that in the case of a triplet birth or a twin birth of a boy and a girl, if it should occur among the people of the Eight Banners, a special report should be submitted to the Board of Rites; if it should occur in the provinces, the governor of such province should report to the Board of Rites, which would have to forward it to the Board of Finance, the latter to grant a premium of five piculs of rice and ten pieces of cloth. In 1674 it was ordered that a special report should be made solely in the case of male triplets, but not in the case of twins or female triplets. In 1684 an edict ordained that in the case of male triplets the Board of Rites and the Board of Finance should submit a joined report to the Throne, and that rewards should be authorized in accordance with law. This benevolent attitude toward the energetic propagators of the race was not an innovation of the Manchu, but a heritage of the Ming; for under the Ming we are frequently informed of special grants of food, cloth, and even paper money, made to these involuntary heroes from public funds.

It may hence be inferred that under the Manchu régime a register of male triplets was kept, and presumably is still preserved in the

archives of Peking. If it should ever be published, the fact must be borne in mind that female triplets were not officially reported. Meanwhile we are thrown back for that period on the local and provincial Gazetteers, which in the chapter on untoward or abnormal events sometimes record cases of plural births.

To cite a few instances of this kind in the period of the Manchu dynasty,—the Gazetteer of Ju-chou in Ho-nan (quoted above) enumerates four cases (all males), which occurred in 1770, 1785, 1824, and 1833. In 1797 a triplet birth occurred in Hwa-yang (prefecture of Ch'eng-tu, Se-ch'wan); the case was reported to the throne, and by imperial favor, a picul of rice was granted to the father, Yang Kwo-yü (*Hwa yang hien chi*, Ch. 43, p. 3). The Gazetteer of Mong-chou (prefecture of Hwai-k'ing, Ho-nan) cites only two cases for the years 1682 and 1736. Most Gazetteers which I have looked up are disappointing: thus the Gazetteer of Shen-si Province (*Shen-si tung chi*) contains only two cases of triplets, recorded for the years 1470 and 1729.

In the Gazetteer of the Prefecture of Sung-kiang, three cases of triplets are recorded between 1367 and 1640 (according to D. J. Macgowan, *Cosmical Phenomena Observed in the Neighborhood of Shanghai*, *Journal China Branch R. As. Soc.*, II, 1860, p. 74).

The data of the Chinese certainly are defective, and cannot entirely satisfy the anthropologist. We miss, for instance, data concerning the ages of mother and father and order of birth in triplet deliveries (*rang chronologique de l'accouchement* of the French statisticians). Above all, we should desire information as to the vitality and fecundity of the offspring. What the Chinese may boast of, however, is the fact that they possess lists of plural births for periods of the past when nothing of the kind was ever attempted in any country of Europe. In the vital statistics of France, plural births have been recorded only from 1858; and in no country of Europe did they receive any attention before the nineteenth century (in Berlin from 1825).

The sum of 277 triplet births for the Sung and 324 for the time from the T'ang to the Ming inclusive may seem a high figure to the uninitiated; in fact, however, it is strikingly low. During the four years 1907-1910 there was in France a total of 327 triplet births; 91, 93, 68, 75 in the respective years, making a mean average of 81.75 per year (*Statistique général de la France, Statistique du mouvement de la population*, Paris, 1912, p. 56). There were, accordingly, more triplet births in France during those four years than in China in the

course of many centuries. Or, to cite another example, in the period 1835-47, there were in Bavaria 1,050 triplet, 56,062 twin, and 3,413,763 normal births. The frequency of triplets varies in different years and in different countries. In 1855, triplets were produced in Scotland by 11 mothers out of 92,300 births; that is, one in 8,391. Triplet births in Scotland from 1855 to 1901, a period of 47 years, numbered 644, and averaged 116 per million confinements (C. J. Lewis and J. N. Lewis, *Natality and Fecundity*, p.62). I do not go any further into the question of the frequency of triplets in Europe and the proportion of triplets to twin and normal births, as the Chinese data are not comparable, and as figures of total births are lacking for the Sung period. Judging from our experience, it must be stated, however, that the Chinese data can hardly be complete; but there is no way of correcting or adjusting the figures, which we are simply compelled to take for what they are worth. The reader should not forget that the material furnished by the Chinese Annals is not intended as statistics, but merely as a record of extraordinary events in human life. In order to give a certain perspective to the number of multiple births, some data concerning the population may follow here. According to the calculations of E. Biot ("Mémoire sur la population de la Chine," *Journal asiatique*, 1836, p. 461), the population of China under the Sung totaled 43,388,380 in the year 1021, and rose to 100,095,250 in 1102; again in 1223, it amounted to only 63,354,005 (in consequence of the loss of northern China to the Kin). These figures, in all probability, are too high; for they are estimated on the number of families given in the Chinese records, the assumption being made that the mean average of the number of individuals in a family is 5, which, in my opinion, is too high a figure.

The total number of triplets recorded for the T'ang and Sung periods is 279. The distribution of sex in this number is as follows: 273 all males, that is, 97.8 per cent; 4 consisting of 2 males and 1 female, that is 1.4 per cent; 1 consisting of 1 male and 2 females, that is, 0.04 per cent; and only one consisting of 3 females (0.04 per cent). Again, the 15 triplet births of the Yüan dynasty and the 30 of the Ming are all males exclusively. The above percentages perhaps give an approximate clew to the actual frequency of sex in triplet births, as far as China is concerned.

C. J. Lewis and J. Norman Lewis (*Natality and Fecundity*, p. 61, London, 1906), who base their remarkable study on the birth registers of Scotland for the year 1855, during which year there were 11 triplet

births in that country (3 males, 5; 3 females, 3; 2 males and 1 female, 3), offer the following conclusion in regard to the distribution of the sexes: "There is a strong probability that in any given occurrence of triplets the children will all be of the same sex, either all males or all females. If the same ratio held in other nations and in other years, it would amount to a law of triplet production that in over 70 per cent of cases the newly-born children are all of the same sex."

In the period from 1858 to 1865, there were in France 1,005 triplet and 4 quadruplet births; among the former, there were 280 entirely males, 218 entirely females, 256 consisting of 1 male and 2 females, and 251 consisting of 2 males and 1 female. The number of twin births during the same period amounted to 83,279; of these 28,056 were two males, 26,310 two females, and 29,363 consisting of one male and one female (A. Puech, *Annales d'hygiène publique*, XLI, 1874).

Of the 277 triplets recorded for the Sung period, the social standing of the fathers is given in only 110 cases, while the remaining 167 cases are merely recorded as chronological-statistical events. Among the 110 cases, the social status of the fathers is distributed as follows:

		Percentage
Rural population	85	76.7
Field-laborers	1	1.1
Workmen	1	1.1
Soldiers	22	20.0
Petty officials	1	1.1
Total	110	100.0

In the Yüan period, 14 common people and 1 soldier share in the 15 cases of triplets placed on record. In the Ming period, 28 common people and 2 soldiers assume responsibility for 30 cases of triplets recorded. It will thus be seen that the bourgeoisie, inclusive of officials, gentry, and merchants, has no share in these records. Peasants and laborers, of course, formed the majority of the populace; but there is no reason why triplet births, if they had occurred in the upper classes, should not have been reported or recorded.

In arranging our data according to families, we arrive at the result that the members of the families Li, Wang, Chang, and Liu, take the uppermost rank. The male Li reach the score with $16^3 + 1^4$, while two female Li figure with 2^4 ; in the years 986 and 996 respectively we have two male Li participating in triplets. The record of the Wang is $13^3 + 2^4$ (plus one female Wang 1^3); the Chang follow with $9^3 + 2^4$, plus two female Chang (2^3), and the Liu with $9^3 + 1^4$, two

members of this family being conspicuous in the same year (1016). This does not mean, of course, that these four families are more prolific than others, but is merely the index of the fact that they are the most numerous and the most widely spread. The share of the members of the Yang family is expressed by the figure 6³, that of the Chao by 5³ (plus one female Chao 1³), that of the Cheng by 4³ (plus one female Cheng 1⁴). The Fung, Sie, and Sü have a 3³ to their credit; the Wei reach the mark 2³ + 1⁴, the Kwo 1³ + 1⁴, while the Chu, Hou, Kao, Mong, and Tung, can only boast of 2³ each. All other families are represented but once. These figures certainly have a mere relative value, and do not allow of any far-reaching inferences. It is assumed by anthropologists that the tendency to multiple births is frequently hereditary, both in the male and female line, more frequently in the former than in the latter; and there is no doubt that heredity is a potent cause in the perpetuation of plural births. In the case of triplets and to a still higher degree of quadruplets the hereditary tendency is particularly striking. Quadruplets often issue from parents who were multiples themselves. Female twins often give birth to twins.

During the 61 years covering our records 1-109 (= 109³), the high-water mark is reached in the year 991 with 9³, and there is only this one year that offers such a record. There are two years (998 and 1015) with 7³, two years (995 and 996) with 5³, 4 years (982, 983, 1014, and 1016) with 4³, 8 years with 3³, and 11 years with 2³. In the remaining years there is but 1³ or 0³. In the Yüan period we have four years with 2³.

QUADRUPLETS

There is a total of 30 on record, the first in A.D. 473, the last in A.D. 1608, a span of 1,136 years.

In this total of 30, 4 quadruplets fall to the lot of a single woman. Twenty-five out of the number of 30, that is 5/6 or 83.33 per cent, consist of males exclusively. The remaining 5 are distributed as follows: 3 cases consisting of 3 males and 1 female (10 per cent), 1 case being 2 males and 2 females (3.33 per cent) and 1 case being 4 females (3.33 per cent).

In 1907 two quadruplet births in France produced 5 males and 3 females; in 1908 there was one quadruplet birth of 4 boys; in 1909 three quadruplet births produced 10 boys and 2 girls; and in 1910, there was one quadruplet birth of 2 males and 2 females (*Statistique du mouvement de la population*, p. 56).

For 7 cases no personal data are on record; in a single case of the Ming period the father's social status is not indicated. In the remaining 22 cases we find 2 soldiers, 1 falconer, and 19 common people, in all probability, farmers. Again, we accordingly meet here with the same social status of the parents as in the case of triplets.

As to the relative proportion of quadruplet to triplet births, see above, p. 50 88.

Pliny (VII, 3, § 33) records the example of a quadruplet birth of two males and two females toward the end of the reign of Augustus and ascribed to Fausta, a Plebeian woman of Ostia (Fausta quaedam e plebe Ostiæ).

QUINTUPLETS

It is striking and worthy of especial mention that the Chinese Annals do not record a single example of a quintuplet birth; at least I have failed in tracing any. Both Aristotle and Pliny were convinced of such an occurrence. Aristotle (*Historia animalium*, transl. of D'Arcy W. Thompson, p. 584b) states: "Some animals produce one and some produce many at a birth, but the human species does sometimes the one and sometimes the other. As a general rule and among most nations the women bear one child at a birth; but frequently and in many lands they bear twins, as for instance in Egypt especially. Sometimes women bring forth three and even four children, and especially in certain parts of the world. The largest number ever brought forth is five, and such an occurrence has been witnessed on several occasions. There was once upon a time a certain woman who had twenty children at four births; each time she had five, and most of them grew up." Pliny (VII, 3, § 33) has it that in the Peloponnesus a woman was delivered of five children at a birth four successive times, and that the greater part of these survived (*Reperitur et in Peloponneso quinos quater enixa, maioremque partem ex omni eius vixisse partu*),—perhaps the same event alluded to by Aristotle. Nijhoff, in his interesting study "Vijflinggeboorten" (Groningen, 1904, 4°), has fully described and figured a case which came under his notice. He further reviews from literary records 29 more cases of quintuplet births, one of which only seems to be of doubtful authenticity. Cf. also S. Shishido, *The Birth of Five Infants at One Parturition* (*Iji Shinbun*, Tokyo, 1901, pp. 433-438).

SEXTUPLETS

In regard to sextuplet birth, I have found only two cases on record. According to the Gazetteer of Chi-li Province (*Ki fu t'ung chi*), it was

