GIANTISM

REPORT OF A CASE

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Of 124 letters and cards requesting reprints of and/or making comments about a recent paper on giantism, seventy-one informed me of a remarkable schoolboy giant at Alton, Ill. This giant has received much newspaper and magazine publicity; my clippings about and photographs of him, over a period of eight years, fill two large scrapbooks. But the popular accounts of his height vary so much in stating his dimensions that their accuracy was questionable. I recorded the following history and measurements at his home, June 2, 1936:

R. W., a white youth, single, aged 18 years 3½ months, is just completing the first semester of his freshman year in college. He is a preformegal giant, 8 feet 3⅜ inches (252 cm) tall, of phenomenal size, molded on a vast scale, colossal and stupendous in bulk, truly Gargantuan in all his proportions, and symmetrically built. His family home is a small and modest house with ceilings 8½ feet high; he stoops through its doorways and picks his way about among the light fixtures. His oversized armchair and bed have been especially made, but they seem too small for him. He has been bothered much by the curious, who want to see such a freak. His parents have come to resent these intrusions of the inquisitive; they would like to have the lad regarded as an ordinary 18-year-old boy, and physicians and laymen alike find it impossible to do this. Both the giant and his mother are unduly resentful of the fate which has fashioned him on so preposterous a scale. He makes his pocket money by posing for photographs, for which his charges are variable and modest, but certain.

He objects to being measured or to talking about himself and says there is "nothing in it" for him; a lavish and continued expenditure of much cajolery, flattery, servility, wheel-

I am indebted to Drs. David P. Barr and Louis B. Debraas of St. Louis and to Dr. J. E. Walton of Alton for their discussions and suggestions and for their kindness in furnishing me with their data on the Alton giant, whose height exceeds that of every other documented case of gigantism on record in medical literature.

ling and exaggerated politeness, and persistence is necessary to secure any information about him. His expression is surly and indifferent, and he is definitely inattentive, apathetic and disinterested, unfriendly and antagonistic. His frequently voiced plaints are a fault that I am aware of," and "I didn't have anything to do with my getting to be like this."

His sour disposition has embittered him very much, and he is introverted and morose, though the newspaper stories, usually quoting his school teachers, say that he is very alert and intelligent. His defective attendance and slow responses hold for all sensory stimuli, both familiar and unexpected, but he does manifest a vivid interest in seeing any memoranda made by a questioned. All functions that we attribute to the highest centers in the frontal lobes are languid and blunted. He says that he never has had any feeling of joy or sadness.

His appetite is enormous, and he eats immoderately, his daily consumption averaging some 6,000 calories and often running to 8,000. He tires very easily and sleeps much.

He was born in Alton, Illinois, native American stock. His maternal grandmother was obese and had nephritis. None of his known forebears were of unusual height, and all his immediate relatives are of very ordinary stature. He is the eldest of a family of five children; he has two brothers, aged 14 and 3 and a half years, and three sisters, aged 16 and 2 years.

He was described at the age of 13 by Dr. Louis L. Behrens and David P. Barr of State. Louis as of July 1931, when he was 13 years 6 months old, as 212.5 cm. tall and endowed with a superabundance of brute strength, and there is little that can be added to the description of his appearance at that time. At birth he weighed 87.5 pounds (3,856 Gm.), and his birth was the ordinary uncomplicated delivery of a primipara. At 6 months he weighed 30 pounds (13.6 Kg.), and at 18 months his weight was 67 pounds (30.4 Kg.). At 5 years he was 5 feet 4 inches (163 cm.) tall, and at 15 years his height equalled his father's. He had a bilateral inguinal herniomy when he was 2 years old. He had measles and chickenpox in early childhood and whooping cough when he was 11. He has not had scarlet fever and has never experienced any "growing-pains." The history of injuries includes only minor wounds to his feet.

He has been a patient in Barnes Hospital, St. Louis, on four occasions, and his routine records there have been used to supplement my own observations, particularly when his lack of cooperation made laboratory work impossible and some details of his measurements inaccessible:

Oct. 13-23, 1931: Cellulitis of the left foot with incision and drainage by through-and-through drains in the web of the first and second toes; simple anemia.

Jan. 21-July 2, 1932: Old fracture of the second left metatarsal.

Oct. 18-23, 1932: Abscess of the left great toe, with incision, drainage and wet dressings.

March 29-May 4, 1935: Ulcer of the right great toe; epistaxis; sickle cell anemia; cachexia from persistent anorexia and vomiting.

The record of his growth given in table 1 is believed to be reasonably accurate. It has been compiled from several independent sources: the hospital notes (a measurement of his height being necessary for each metabolism determination), the record of measurements kept by his father, the physician's accounts of newspaper correspondents (with an average deduction of 1 1/2 inches [32 mm.] for the heels of his shoes), since he was never asked to remove his shoes when he was backed up against sundry walls to have rulers leveled off above his crown), a tailor's specifications and a shoe manufacturer's publicity material, and a long series of photographs from the backgrounds of which could be measured.

It will be seen that this growth curve has been steady and consistent, without noticeable spurts or setbacks. One cannot predict when the curve will level off; I think that the lad's height is still actively increasing.

His giant stature is quite like in physique and more than a little like his father. His massive frame and large hands are inadequately developed. His general posture is good for his size and weight. His sitting posture is "droopy." His sense of position, for his arms, hands, legs and feet, is very poor. His motor coordination is not good, or else he is unduly slothful in nature. He is careless in his dress, his handwriting is untidy and poorly legible.


His blond hair is fine and very thick; his skin is fair, cold, moist, elastic and stretched, and very pallid. His eyelids are thin, and they are not rugged as in acromegaly. He is severely myopic and has a moderate degree of astigmatism, and a divergent squint, which is alternative. He suffered much from headaches before these refractive errors were corrected with glasses. There is a microphthalmia. He is round-eyed and contract normally to light and slowly to accommodation. The sclera are clear. There seems to be a slight photophobia, a slight drooping of the lids and some lid lag; there is very little contraction of the visual fields. The nose is roughly shaped and rather bulbous, and the nostrils are very large. The nasal septum shows a marked deviation to the right, but the airways are clear. He thinks his sense of smell is normal. His ears share in his gigantic makeup; the pinnae are heavy and flaring. The external auditory canal projects themselves upward to an unusual angle into the skull, rather than in the usual course slightly downward and forward. His lips are thick and heavy, and pale. His teeth are very large, regular and evenly spaced and in good condition; the occlusion is good. The palate is unusually high. His tongue is big but not disproportional so. The tonsils are enlarged and a little injected, without purulent masses. The voice is a weak bass, thick, husky and rumbling; and it is more likely to come than to be heard. The voice has the quality of a patient with a cold, and an acute hoarseness.

The scapular borders are straight, and the curves of the clavicles are straightened out a little from the normal. His heart shares its proportions; the apex beat is somewhat diffuse under the left nipple. There is a reduplication of the pulmonic second sound enlarged and a little injected; no purulent masses. The voice is a weak bass, thick, husky and rumbling; and it is more likely to come than to be heard. The voice has the quality of a patient with a cold, and an acute hoarseness.

His blood pressure has been about 110 systolic and 80 diastolic for five years. The respiratory rate is 16 and the thorax full. The abdomen is slightly protuberant, rounded and "bulging." It moves freely, and immensely, with respiration. The scars of the early bilateral inguinal herniomy are in good condition. There is a notching of two or three times. The external goutilla are quite small; both testes are descended. The pubic hair is scanty, and there is no body hair. He has no lamnethitis. His hands, whose measurements will be given later, are startlingly enormous; the metacarpals are so extremely long that the thumb, to appearances, sits noticeably nearer the wrist than it should. At the knuckles the fingers tend to an ulnar deviation laterally, away from the thumb's side of the hand, to a marked degree.

His nails are thin. Roentgenograms of the hands show, despite much tapering of the fingers, an abnormal amount of tuffing of the terminal phalanges of all his digits. His fingers are not "twists" in his writings. He has tender fingers, knuckles and ankles, without being greatly misshapen, still show that they do not function with complete normalcy as joints; they are elongated and awkwardly formed. But in the hands and feet, misshapen. In the hands and feet, misshapen.
His walk is a slow, laborious, shoulder-hunching shuffle. Like most other giants, he is especially prone to trophic ulcers and indolent infections of the feet, which have caused him much grief. All sensations (touch, pain, temperature) are void and blank below the ankles, and the loss of the thermal and tactile sensibilities also extends to the middle third of the lower legs. There is a loss of temperature sense, too, up to the level of his knees. His own explanation is that his "legs have grown too fast for the nerves to keep up." It is possible to conceive of his diminished sensibility arising from a "standard" number of ordinary pain areas being distributed over a skin with the surface area more than twice the normal in size. He is unaware of a wrinkle in his sock or a foreign body inside his shoe until a blister, followed by an ulcer, is formed, and only then do the general symptoms of a systemic reaction arouse him.

Roentgenograms of the skull show the air spaces of the para nasal sinuses and mastoid cells developed to an unusual size. The sella turcica is very large, and its floor is pierced by a tubular structure (persistent Rathke's pouch) which extends downward and forward through the sphenoid to the posterior wall of the nasopharynx, where an indefinite soft tissue shadow bulges into the lumen. He must have a most extraordinary amount of functioning pituitary tissue. The mental reactions furnish the picture of more than half of the giants seen in today's sideshows. It is of interest to read that Phineas T. Barnum, doyen of American showmen, after expressing a doubt that there were any men of 8 foot (244 cm.) stature, carefully instructed a friend who was acting as his agent in hiring a French giant 3 to give the tall man a job only if his height, as measured when the bodiless giant lay flat on the floor, exceeded 7 feet 2 inches (213 cm.). Just why the impresario of this height had been in his employ previously. This boy at Alton could indulge himself in the luxury of an 13 inch slouch and still get on the payroll of a latter-day Barnum.

The height limit of the U. S. Army in World War days was 6 feet 6 inches (198 cm.). Among 334 million men between the ages of 18 and 30 (a relatively larger proportion of them between 21 and 30) only seven cases of gigantism 4 were found. I have been unable to identify these seven cases, for only a little information about them is to be had from the tedious tables of the work cited. But four of these giants were accepted for full army service, in spite of their diagnoses. It must be presumed that their heights were not greatly in excess of the army's standard. One of the four was a Negro from the Mississippi River bottoms of rural Arkansas 5 and the other three were white. One of the three came from a rural section in the northern half of Minnesota 6 where the population was 10 per cent Scandinavian, another came from a rural section in the southern half of Minnesota 7 where the population was more than 20 per cent German and Austrian, and the last, a native white Southerner, came from eastern Oklahoma 8 where, in a rural district, there was a sparsely settled Indian territory. Perhaps these men became drum majors for army bands. Their roster does not seem to include Homer Parks of Memphis, Ten., who is still regularly exhibiting as a circus giant under a banner which exorts him as being the tallest soldier overseas. He makes an imposing spectacle in American Legion parades.

Of the three men whose gigantism was sufficient reason to reject them from army service, one was a white mountainer in a rural district of eastern Kentucky 9, a second came from an urban district in section 2 of Louisiana 10 and the third came from Washington 11; the exact locale is in doubt, since the earlier references assign him to an urban district, while the later ones place him in a rural section. Tracing these giants must be left to some one who knows the ins and outs of War Department officialdom and the whereabouts of record cards there. I have been told that the statistical cards used in compiling the data were destroyed. The material of the text cited must be incomplete, for I have competent evidence that Bernard Coyne (1897-1921), an undescribed 7 feet 8 inches (234 cm.) giant of the infantilism type who lived on a farm near Ot, Iowa, appeared before the examining board at Des Moines in the draft routine of 1918 and was rejected because of his gigantism.


7. Love and Davenport, pp. 448, 1120, 1320 and 1477.

8. Love and Davenport, pp. 448, 1120, 1320 and 1477.


10. Love and Davenport, pp. 448, 1120, 1320 and 1472.

11. Love and Davenport, pp. 448, 1120, 1323 and 1472.

12. Love and Davenport, pp. 448, 1120, 1320 and 1472.

13. Love and Davenport, pp. 448, 1120, 1320 and 1472.