level of the lower edge of the trochanter minor on the anterior side, and on the lower end about in the place where it is customary to measure the lower sagittal diameter, both points being of course in the medial plane. The height would be the greatest height of the anterior surface above this base.

By this method we obtain for the two femora under consideration a chord-height index = 5.5 right and 5.3 left. The curvature is not evenly distributed along the diaphysis; it is greatest at the boundary between the upper and middle thirds. The contrary is the case in *Homo primigenius*, where the strongest curvature is in the lower part of the diaphysis. Thirty femora of the Anatomical Institute show, with the single exception of two belonging to the same individual, the same character in this respect as our Anau femora; this seems, too, to be the rarely broken rule among modern Europeans. I measured the greatest curvature, and obtained the curvature value, which is to be defined as the reciprocal value of the radius of curvature (in meters) for a distance of about 80 mm. on both femora = 2.7, which would correspond to a curvature radius of 37 cm.

Notwithstanding the impression of slenderness made by this femur alongside of that of the Neandertal man or even of that of most Europeans, its length-thickness index (respectively 24.8, 23.9) lies above the mean value, 22.8, given by Bumüller (1899, p. 21). This, however, is due to the fact that the circumference of the middle of the diaphysis is much enlarged by pilaster-formation, as Broca has called the ridge which sometimes extends down the posterior side of the femur and carries the linea aspera. To characterize the degree of development of the pilaster Broca calculated an index pilastricus, taking the sagittal diameter at the point of greatest elevation of the pilaster, in relation to the transverse diameter. This index amounts for our femora, for both sides, to 121.4. We may use for comparison the following figures compiled by Klaatsch (1901, p. 627) from different authors:

| | | | |
|---|---|---|---|
| Japanese (Bumüller) | 100.0 | Eskimo (Hepburn) | 118.4 |
| Aino (Bumüller) | 103.1 | Negro (Bumüller) | 119.8 |
| Malayan (Hepburn) | 104 | Australian (Hepburn) | 122.2 |
| Maori (Hepburn) | 110.1 | Cro-Magnon (Bumüller) (one individual) | 128.0 |
| Andamanese (Hepburn) | 113.5 | | |

Marked curvature of the diaphysis has been held responsible for the growth of the pilaster. Manouvrier and Bumüller find its cause in muscular action. Neither view seems to me to be correct. Bumüller shows that curvature and pilaster-formation do not stand in any correlation. If we visualize the direction in which the bone is compressed by the weight of the body, it will seem very probable that the strongest tendency to break will be somewhat below the middle of the diaphysis; that is, at that point where the pilaster-formation is as a rule most marked. An exact proof of this view can be had only experimentally. The strongest tendency to break moves elsewhere when the bone is deformed by abnormal curvature. This can happen, for instance, in rachitic changes. Then the pilaster can move up into the upper third of the diaphysis. As Bumüller remarks, a strong pilaster-formation is often accompanied by a marked convexity of the anterior surface, in a sense an anterior pilaster (fig. 493 *d*). This is equally