

by removing the first dorsal interosseus, or indeed by merely dividing the head of this muscle which springs from the first metacarpal bone. It is a very small muscular slip which, as Bischoff expresses it, has been "thrust into the deep," by the largely developed adductor obliquus. It lies in series with the palmar interossei.

In the tabular view, which is given in the eighth edition of Quain's Anatomy, of Muscular Homologies in the Upper and Lower Limbs, the relations between the muscles of the thumb and great toe are stated with tolerable accuracy with the exception that the position of the two heads of the flexor brevis pollicis is reversed. The following is an extract from that table :—

Flexor brevis pollicis, inner head,	. . .	Flexor brevis hallucis.
Flexor brevis pollicis, outer head,	. . .	Adductor hallucis obliquus.
Adductor pollicis,	. . . . .	Transversalis pedis.

In place of this the table should be constructed thus :—

Flexor brevis pollicis,	. . . . .	Flexor brevis hallucis.
(a) Radial head,	. . . . .	(a) Tibial head.
(b) Interosseus primus volaris,	. . . . .	(b) Fibular head.
Deep or ulnar head of flexor brevis pollicis,	. . . . . } . . .	Adductor obliquus hallucis.
Adductor pollicis,	. . . . . {	Adductor transversus hallucis (i.e. transversalis pedis).

II. The question now arises: If the intrinsic muscles of the foot are laid down in three layers, to which of these does the opponens muscle belong?

It is necessary, however, before we inquire into this point that we should have a clear understanding what the muscles are to which the term "opponens" should be applied. We need not look to function for a true definition, for many of the opponens muscles have little or no opposing action. It is clearly the insertion which must be taken as the distinguishing feature, and we may define the term as being one which may be properly applied to any intrinsic muscle, which is inserted into the shaft of a metatarsal bone.

An opponens hallucis is a very rare occurrence. In his memoir upon the *Hylobates leuciscus* Bischoff remarks that among the Apes he has "only found it as a peculiar speciality in the Orang and Macacus." In the report of Lecture xvii. upon the Structure and Classification of Mammalia, delivered by Professor Huxley before the Royal College of Surgeons in 1864, and published in the Medical Times and Gazette, we find the following passage (vol. i. p. 596):—"There was present in the specimen (Orang), dissected by Professor Huxley, an opponens hallucis, inserted into the middle third of the meta-