HUNTINGDON, of San Francisco. "Bone Transplantation." *Annals of Surgery, February,* 1905.

A case report in which a defect of the whole shaft of the tibia was replaced by a corresponding portion of its companion fibula.

Nichols in the Journal American Medical Association, February 3rd, 1904, is referred to as an able discussion on the subject. Nichols reported eleven cases which demonstrated how, in many instances, especially where the defects were of minor dimensions, when the periosteum was preserved, there was complete reproduction of the bone with the attainment of satisfactory results as far as weight-bearing and function were concerned. Two cases occurred where almost the entire diaphysis of the tibia, in one of which after four months almost complete regeneration had occurred, but in the second there was functional failure after several years.

No reference is made to the work of Ollier, of Lyons, on sub-periosteal resection which I think is very suggestive though written many years previously.

Huntingdon, on undertaking his case, recognized that a central segment of the fibula, firmly fixed to the tibia at both ends by bony union, would carry with it its own nutriment supply, and that this would be greatly increased by the more generous nutrition of the host. Assuming this as fact, he reasoned that the bridge of fibula thus formed would rapidly expand and in reasonable time approximate the dimensions of the larger bone, thereby insuring a satisfactory condition as regards weight-bearing. Another important factor was that the important relations of the lower extremity of the fibula were to remain undisturbed, *i.e.*, the integrity of the ankle joint would be preserved and locomotion be unimpeded.

He then cites his case of a patient, aged seven years, suffering from an extensive osteomyelitis of the tibia. The diaphysis was resected, and having in mind the reproduction by the periosteum this was sewn into a tube. After three months the wound was healed, but three months later there was still a gap about five inches in the shaft of the tibia, and the leg hung flail-like and could not be extended.

He then determined to bridge the gap with a portion of the fibula, and sawed through that bone at a point opposite the lower end of the upper tibial fragment and attached it thereto. This was easily done, and