The writer, Professor Boos, draws on his experience in World War II of 263 cases treated at the Oskar-Helene-Heim Clinic in Berlin, an institution which seems to combine some of the features of Roehampton. When he moved to Tübingen Professor Boos reviewed all the patients in south-west Germany—108 in number—who had been treated by Krukenberg's method of converting the forearm stump into a two-pronged claw. He reviews the prosthetic methods of cineplastic procedure of the upper arm stump and of the phalangisation of the metacarpals, and then deals with his favourite subject and gives a full description of the Krukenberg procedure, the difficulties which are encountered and the complications. He also deals with the subsequent treatment of cases based on the phantom hand in which muscle re-education is employed. He suggests that it is important for each patient to be trained for his daily life, the ultimate training to take into consideration the future occupation of the patient. About 58 per cent of patients without hands are employed. The amputees are generally fitted with a prosthesis which is activated by the prongs, and this was Krukenberg's original purpose, but most of these patients find that the bare stumps are more useful. They, however, need specially modelled handles for most objects they use.

A section is devoted to the great problem of training blind people who have lost their hands.

The book goes on to deal with the social as well as the surgical problems encountered. The author says he advised patients in all matters, even in the choice of their wives. Most of these people do marry. This is a point of great significance when it is considered that nearly half of these patients need to be helped with their toilet, and only slightly fewer with their washing.

The author considers that the treatment of the handless should be concentrated in special centres where the necessary arrangements can be made so that surgeons can gain enough cumulative experience.

Fortunately the loss of both hands rarely occurs in civilian life and one cannot but hope that the unique experience gained by this author and others will not need to be repeated.—LEON GILLIS.

Transactions of the International Society of Plastic Surgeons. Second Congress, London, 1959. Edited by A. B. WALLACE, M.Sc., F.R.C.S.Ed., Editor of the *British Journal of Plastic Surgery*. 10 × 7½ in. Pp. xxiv + 589, with many illustrations. Index. 1960. Edinburgh and London: E. & S. Livingstone Ltd. Price 90s.

Plastic and orthopaedic surgery are fields which have much in common and it is to be expected that in this volume, *Transactions of the Second Congress of the International Society of Plastic Surgeons*, there will be much to interest the orthopaedic surgeon.

Some eighty papers, embracing all aspects of reconstructive surgery, are reproduced in full, together with brief summaries in French, Spanish and German.

The papers are grouped in sixteen sections, chiefly according to the anatomical region discussed: for example—jaws, grafts for defects of facial bones and skull, genitalia, etc. Clearly this is no text-book and could be better described as a massive edition of a *Journal of Plastic Surgery*. As such it provides an interesting synopsis of advances, endeavours and problems in this expanding branch of surgery.

Some sections will be of particular interest to orthopaedic surgeons. There are eleven papers on various aspects of hand injury, and among these Littler's description of his neurovascular skin island transfer is outstanding. Harrison describes the retention of one slip of the intact sublimis with grafting for a divided profundus tendon. A novel means of splinting a finger in flexion is described by Planas of Barcelona, who inserts a simple stitch through the free border of the thumb nail and the nail of the finger to be held flexed.

Among several papers on tissue preservation, a preliminary report by Gibson of a living homograft cartilage bank with a rapid test for viability is of particular interest.

One might criticise the volume in that it lacks balance, that too much space is devoted to cleft lip and palate and not enough to the numerically greater problems of accidental trauma and burns. This is, however, the report of a Congress and its make-up was thus predetermined by the time allocated to the various subjects discussed.

The book is expensive at £4, 10s. but it is lavishly produced and the illustrations are excellent. It will interest all who undertake the surgery of repair.—R. L. B. BEARE.

Symposium sur l'Os Hétéroplastique. Under the Direction of Professor M. GUILLEMINET, Clinique de Chirurgie Orthopédique de la Faculté de Médecine de Lyon Hôpital Edouard-Herriot. 9½ × 7 in. Pp. 103, with 64 figures and 12 tables. 1959. *Revue de Chirurgie Orthopédique et Réparatrice de l'Appareil Moteur*, Volume 45, Supplement No. 1. Paris: Masson & Cie. Price \$1.65.

In this country bone heterografts have never been widely used. This symposium which records experiences with this material in several continental centres is therefore of great importance to us.

In Lyon, where this meeting was held, facilities have been developed for obtaining sterile calf bone, which is preserved either by refrigeration at -30 degrees Centigrade, or more recently by freeze drying. No less than 1,500 grafts have been distributed to surgeons in the past ten years.

Several of the papers describe attempts to assess this material experimentally. While they clearly show that heterografts can behave like autograft or homograft, the process is usually delayed; sometimes greatly.

The papers on the clinical use of heterografts are very difficult to evaluate because of the variety of techniques and operations described. In general it is evident that, although brilliant results can be obtained, a high proportion of failures must be expected. Complications such as total rejection of the graft and persistent discharging sinuses are frequently mentioned. Marion and his colleagues had a success in only 51 per cent of cases. Desbrosses reports success in 90 per cent when using heterograft to fill bone cavities, but his illustrations do not support his text.

On the basis of the evidence presented in this symposium bone heterograft would appear to be inferior to both autograft and homograft.

The enthusiasm and industry with which Professor Guilleminet and his colleagues have pioneered this field command respect, and the results of their further work with freeze dried heterograft will be watched with interest.—J. CHALMERS.

Progressi in Ortopedia. Scritti Medici in Onore di UGO CAMERA. Nel 50° Anno Della Sua Attività Scientifica e Professionale 1909–1959. A cura di C. A. LIÈVRE. Aiuto nell'Istituto Chirurgico Ortopedico "Regina Maria Adelaide" Clinica Ortopedica dell'Università—Torino. $11\frac{1}{2} \times 8\frac{1}{4}$ in. Pp. 553, with many figures. 1959. Torino: Edizioni Minerva Medica. Price L. 8,500.

This is a compilation of unrelated works by a large number of authors from many countries to honour a distinguished colleague. There are about one hundred such contributors to the present volume, knowing that for the most part their contributions would be as good as lost to the ordinary medical reader. This is because, up to the present time, no way has been found to list the works appearing in these volumes either by authors or by subject matter in the indexes of bibliography. Perhaps it is for this that the individual contributions as a homage are sent in, for they will be sacrificed at the altar of the god of friendship.

The quality of many of the works in the present compilation, and their number, are evidence of the high consideration and affection that so many orthopaedic surgeons have for Hugo Camera. His personal contribution as a pioneer in many fields of the speciality gave Camera a place in Italian orthopaedics side by side with Putti, Delitala and others from the past generation. He was the first to advocate the shortening of the longer limb to treat disparity in growth and it was also he who pointed out first that coxa vara could be the result of an injury of the cartilage anlage.

It would be impossible to name some of the papers published in this volume without doing injustice to others and for this reason I abstain, but for those who can read Italian it is worth perusing its index where they will find a large area of the field of orthopaedics covered by men whose names are at the forefront of continental orthopaedic surgery. It consists of 553 well printed pages and is profusely illustrated.—Joseph TRUETA.

Chemical Osteosynthesis in Orthopaedic Surgery. By Michael P. MANDARINO, M.D., Associate, Department of Orthopaedic Surgery, Hahnemann Medical College and Hospital; Associate, Department of Orthopaedic Surgery, Misericordia Hospital, Philadelphia, Pennsylvania. American Lecture Series No. 391. $9\frac{1}{2} \times 6\frac{1}{2}$ in. Pp. x+72, with 36 figures. Index. 1960. Springfield, Illinois: Charles C. Thomas, Publisher. Oxford: Blackwell Scientific Publications Ltd. Toronto: The Ryerson Press. Price 36s.

In the first fourteen pages of the text many examples are given of isocyanate and di-isocyanate reactions which can take place in the formation of a polyurethane resin. The author does not, however, give the constituents used in the manufacture of the polyurethane, marketed under the trade name Ostamer and about which the book is written. In a polymerisation reaction there is never complete reaction of the constituents. In the case of Ostamer, the theoretical degree of polymerisation is the more difficult to achieve at operation because of the method of mixing the ingredients, the lack of control of the temperature of the reaction and the possible inhibitory effects of blood and fat. A list of mechanical properties is given which presumably has been obtained using specimens of materials prepared under laboratory conditions. Ostamer can be likened to a cement which can be used to fill bone defects and repair fractures. Like cement, the resin has a high compression strength—20,000