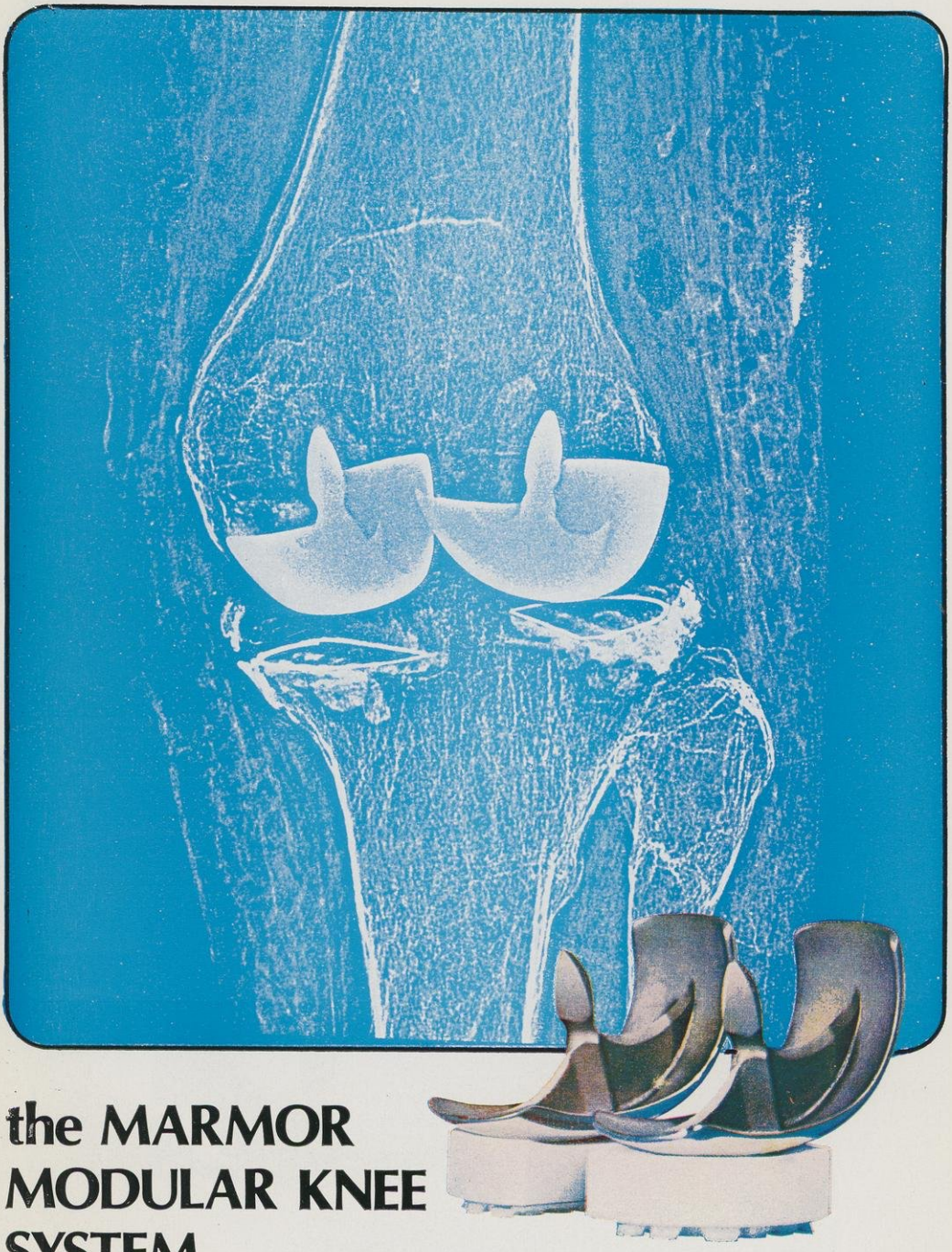
Marmor Modular Knee System and Tronzo Total Hip System advertisement.

[s.l.]: [s.n.], 1969

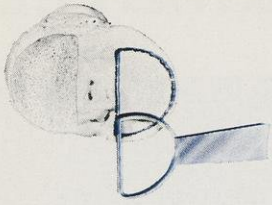
THE CONSERVATIVE APPROACH TO TOTAL KNEE REPLACEMENT...



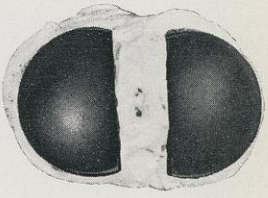
the MARMOR MODULAR KNEE SYSTEM

RICHARDS

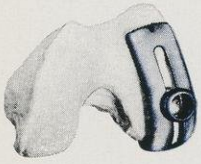
Simplified Technique Permits Continuous Testing and Adjustment of the Device at Surgery



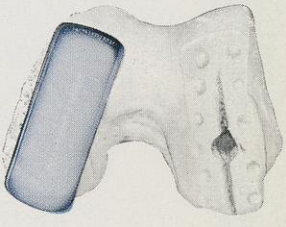
1. Utilizing the Tibial Marking Template, the position of the tibial component is indicated with methylene blue (right) and the plateau is deepened to accept the component (left).



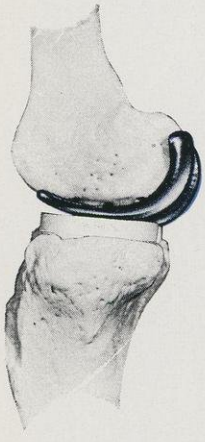
2. Trial Plateaus are placed into the prepared tibia until a Plateau of the appropriate height is selected for each side of the joint.



3. A Femoral Template of appropriate size is fitted to each femoral condyle, the template is outlined with methylene blue and a central fixation hole is drilled through the template.



4. Preparation of the femoral condyles is completed (right) and Trial Femoral Components are inserted (left).



5. The joint is tested with tibial and femoral trial components in place. When satisfactory motion and alignment are achieved, the actual Tibial Prostheses are cemented into place and the joint is again tested. Finally, the actual Femoral Prostheses are cemented into place and the knee replacement is complete.

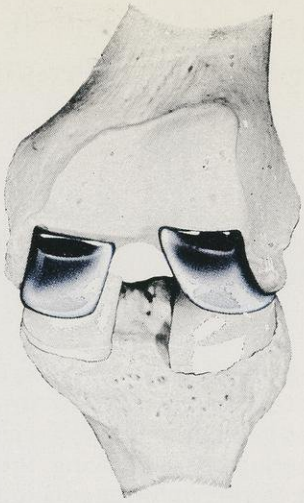
NOTE: A comprehensive booklet and color film describing in detail the surgical technique of the Marmor Modular Knee are available from Richards.

RICHARDS

the MARMOR MODULAR KNEE SYSTEM

patent pending

This precise grouping of interchangeable prosthetic components and simplified instruments permits total or partial replacement of the articulating surfaces of the knee while leaving the widest possible surgical latitude in fulfilling the needs of the individual patient.

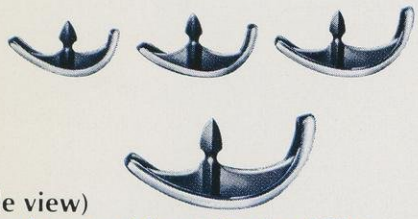


- Seven interchangeable prosthetic components may be used in nearly any combination to custom-fit anatomical variances.
- Availability of tibial components in varying heights permits correction of varus or valgus deformities without cement 'layering.'
- Four-part design allows independent restoration of either compartment of the knee when only one side is affected.
- Components are designed to approximate natural joint surfaces so that there are no grooves or tracks to dislocate.
- Normal rotation may occur in the joint without placing undue stress upon cement in the tibia.
- Plastic tibial components are easily replaceable should they become worn.
- Simple insertion procedure requires no precision jig-cutting of bone: retains all natural ligaments intact.
- Minimal bone removal and cement usage leaves the widest possible surgical latitude.

Interchangeable prosthetic components are designed to approximate as nearly as possible the natural articulating surfaces of the knee. Any of the three sizes of femoral components may be combined with a tibial component of appropriate height to custom-fit each case presented.

Femoral Component

316 type stainless steel

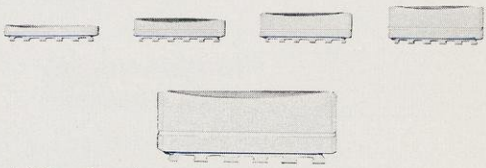


(side view)
finned to provide optimal stability in a small amount of cement

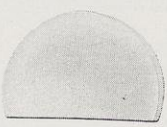
(bottom view)
micro-polished articulating surface is clearly marked anterior and posterior.

Tibial Component

ultra high molecular weight polyethylene



(side view)
features self-locking cement channels and radiopaque marker

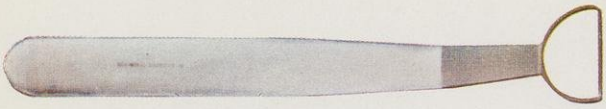


(top view)
articulating surface of identical size is common to all plateaus.

RICHARDS

A Simple and Logical System of Instruments, Trial Implants and Prostheses

TEMPLATES



Marking Template

TRIALS

6mm Trial Plateau

9mm Trial Plateau

12mm Trial Plateau

15mm Trial Plateau

IMPLANTS

6mm Tibial Plateau

9mm Tibial Plateau

12mm Tibial Plateau

15mm Tibial Plateau

The arrangement of instruments, trial implants and prostheses in the Marmor Modular Knee System has been designed to facilitate a logical sequence of marking, testing and fitting the correct components to the individual knee. Trial implants are clearly distinguishable and preclude inadvertent damage to the actual components during surgery.

3/8" Twist Drill

Small Femoral Template

Small Femoral Trial

Small Femoral Condyle

Medium Femoral Template

Medium Femoral Trial

Medium Femoral Condyle

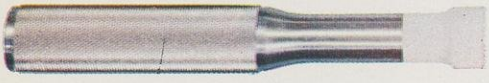
Large Femoral Template

Large Femoral Trial

Large Femoral Condyle

Femoral Template Driver/Extractor

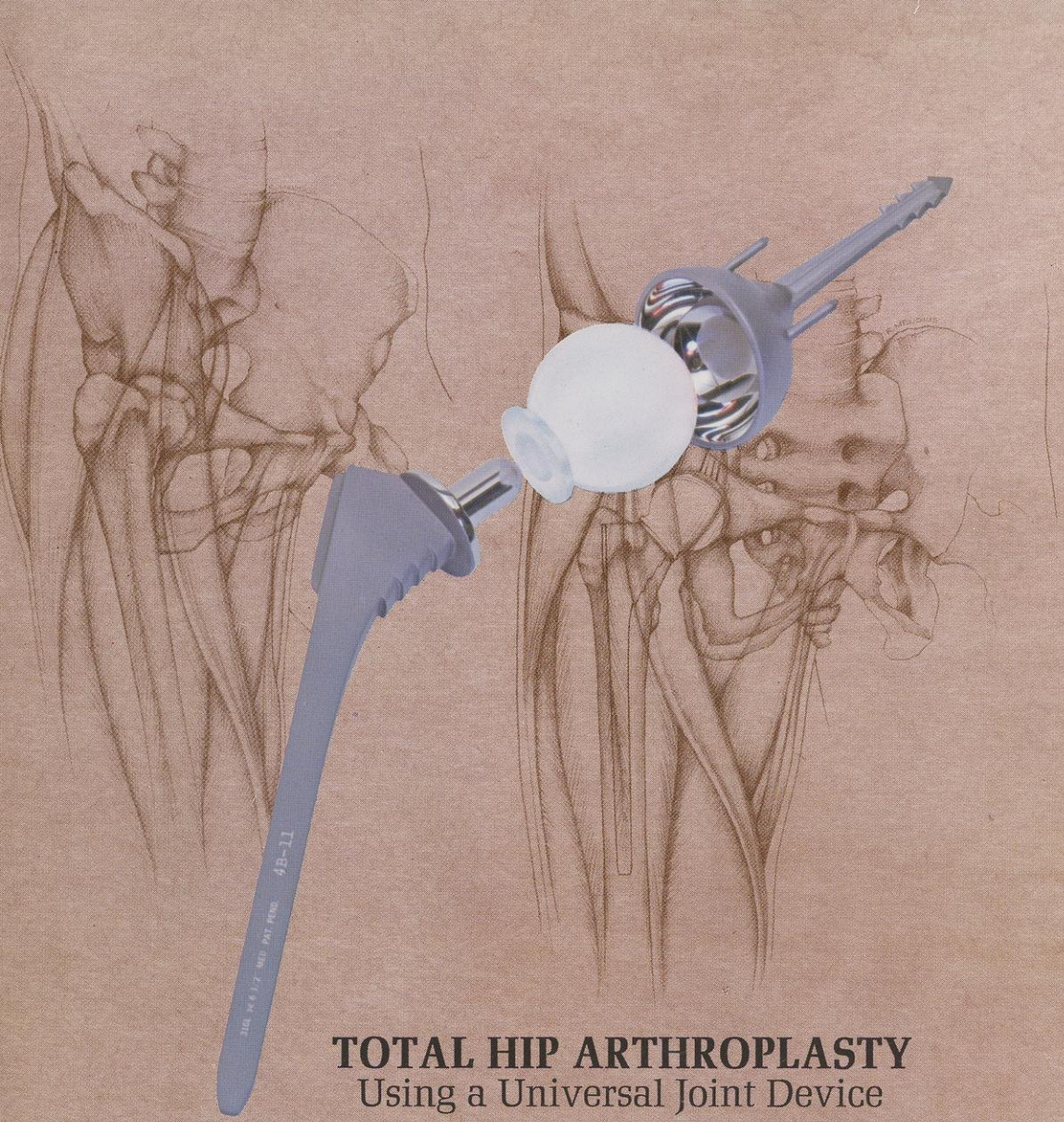
Plastic Cement Spatula



Femoral Condyle Driver/Impactor

Tibial Plateau Impactor

RICHARDS MANUFACTURING COMPANY, INC.
1450 BROOKS RD., MEMPHIS, TENN. 38116, A.C. 901 • 396-2121
IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO, (416) 677-9744



TOTAL HIP ARTHROPLASTY

Using a Universal Joint Device

The Tronzo Total Hip System

Use of this total hip system presents a number of unique options in the performance of low-friction total hip arthroplasties. Because it is equally adaptable to implantation with or without acrylic bone cement (polymethylmethacrylate) the Tronzo Total Hip is the only prosthesis with a solid, high-density polyethylene bearing surface that leaves the use of cement to the surgeon's discretion. The carefully engineered, three-part device overcomes many traditional barriers to sound fixation by providing a consistent outlet for minimizing those factors normally associated with prosthetic loosening and pain. Additionally, the versatility of interchangeable stems and necks in different sizes allows the surgeon to "custom fit" the device to individual patients.

RICHARDS

FIG. 1

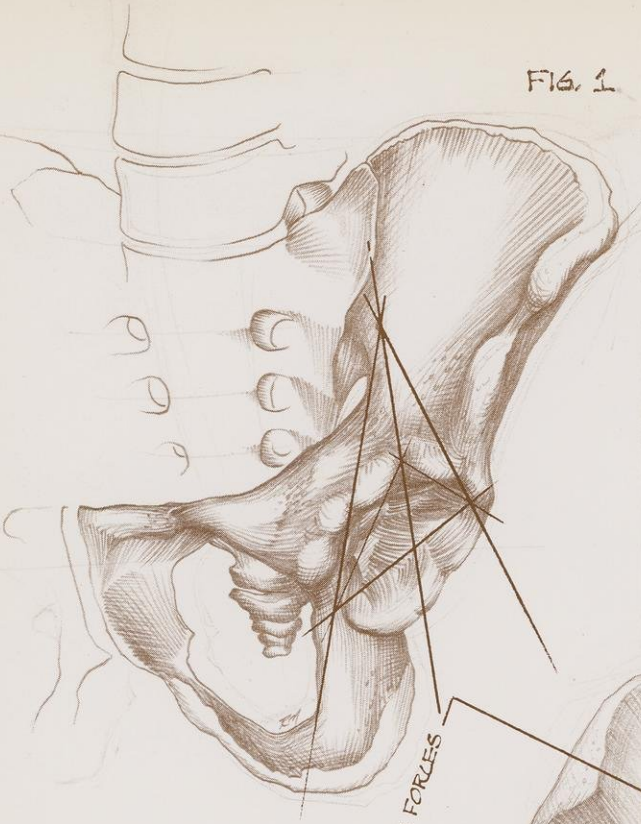


FIG. 5

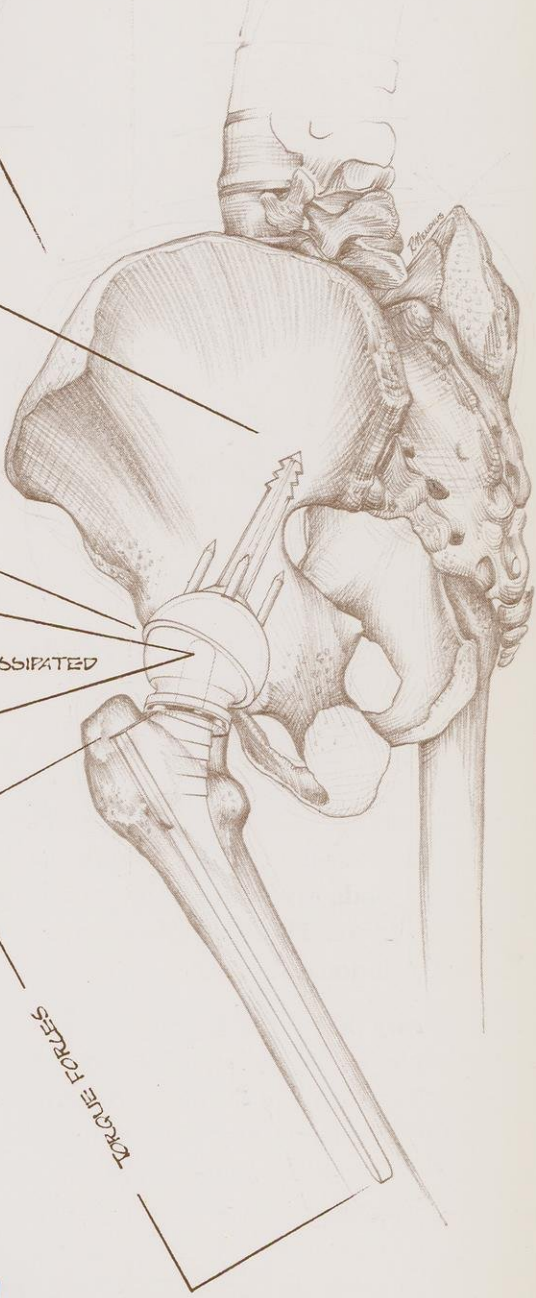
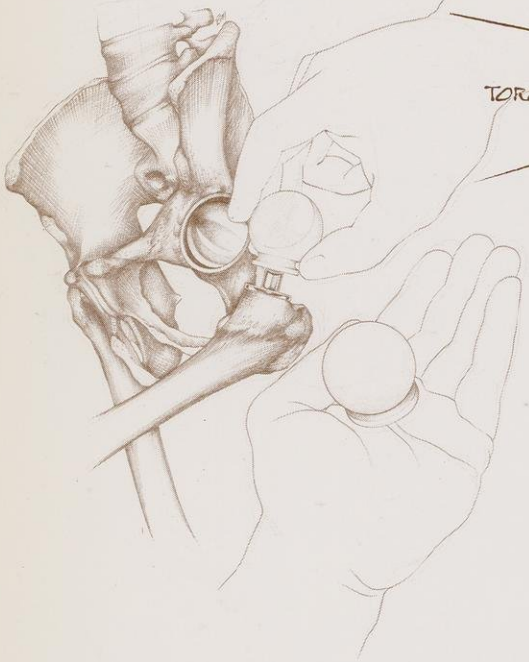


FIG. 4

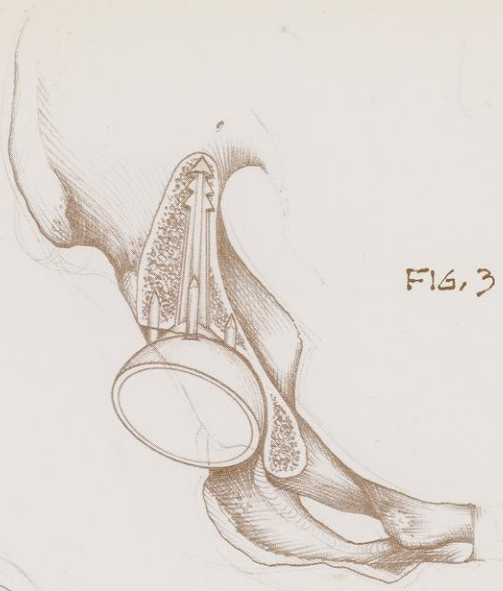


RICHARDS

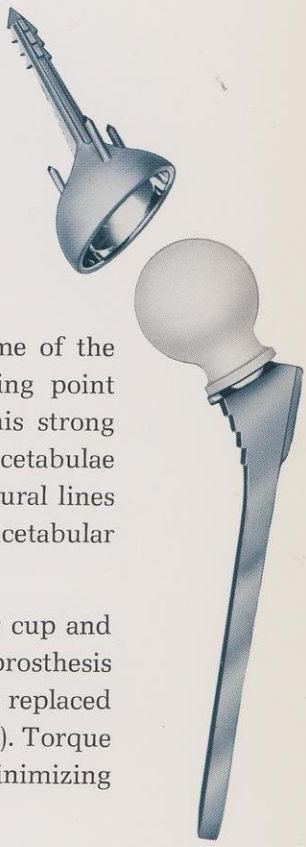
PRINTED IN U.S.A.

FIG. 2

FIG. 3



The Tronzo Total Hip System



The wedge of hard, weight-bearing bone extending from the dome of the acetabulum to the sacro-iliac joint (fig. 1) serves as the anchoring point for the acetabular component cantilevered on its central nail. This strong bone wedge, present even in hips with shallow or underdeveloped acetabulae (figs. 2 & 3), lends firm support to the implant along the body's natural lines of weight-bearing. Three peripheral spikes seated securely in the acetabular wall resist rotational forces on the cup (figs. 3 & 5).

A high density polyethylene ball moves freely within the acetabular cup and upon the spindle and collar of the femoral component. Virtually all prosthesis wear is thus confined to the softer material of the ball which may be replaced at some future time without disturbing the metal components (fig. 4). Torque forces exerted on the total device are dissipated at the ball, greatly minimizing their loosening effect on the other components .

RICHARDS

The Tronzo Total Hip System

PAT. PEND.

IMPLANTS

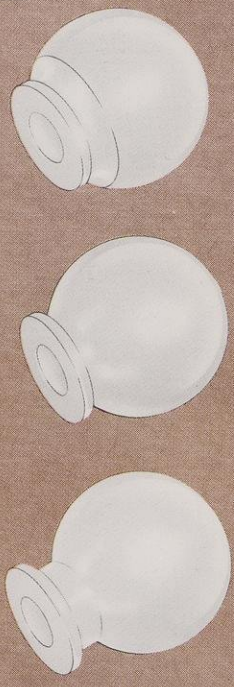
Stainless Steel*Femoral Stems

Three different size stems are available to meet the surgeon's need for achieving firm fixation in various caliber femoral canals.

Stainless Steel*Acetabular Cup

High Density Polyethylene† Balls

Three interchangeable neck lengths allow restoration of the abductor muscles to their proper tension.

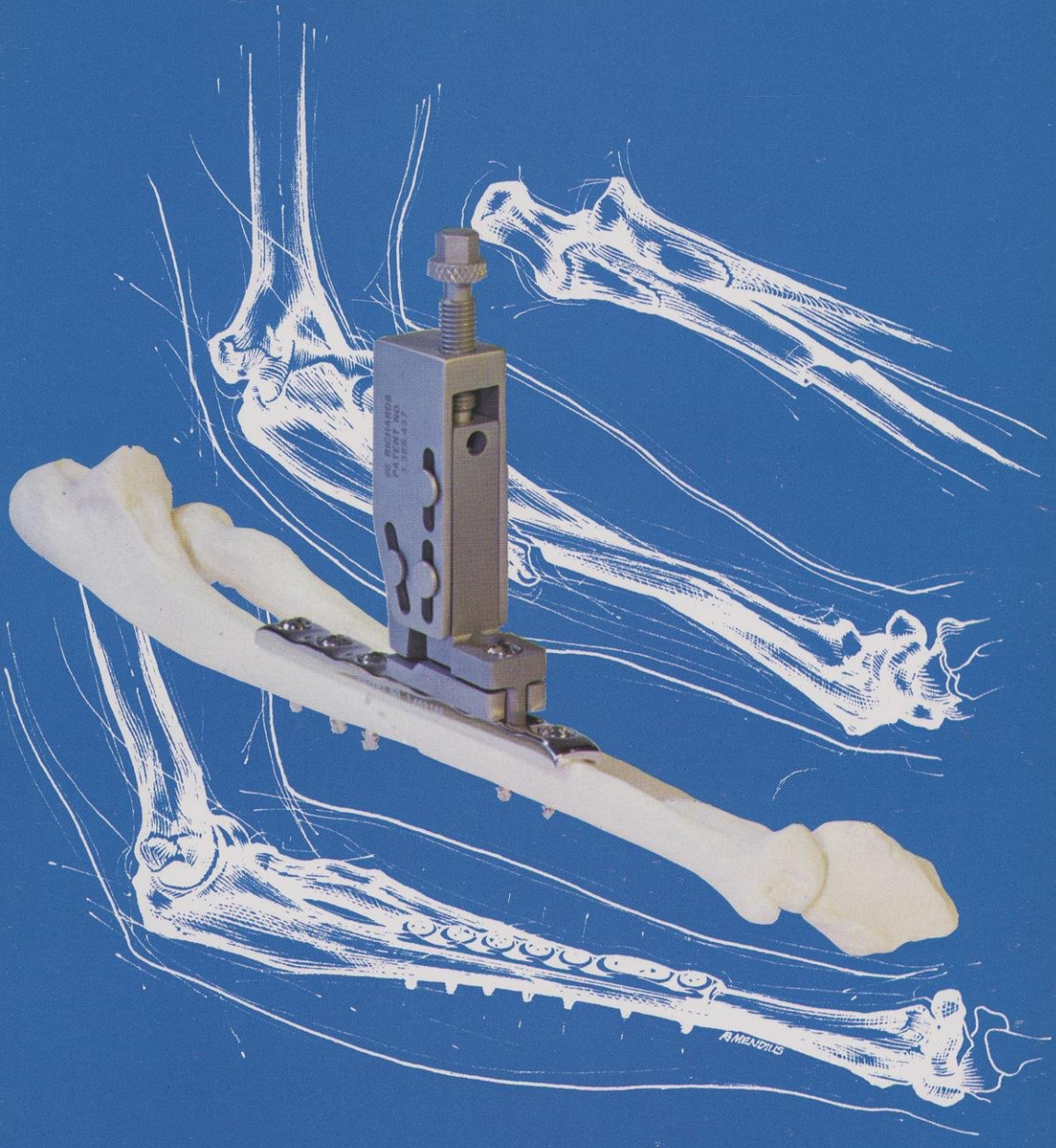


*type 316L VM stainless steel †ultra-hi molecular weight Polyethylene

A complete set of precision instruments available from Richards facilitates accurate implantation of the Tronzo Total Hip implants.

The illustrated booklet and surgical technique entitled "Total Hip Arthroplasty Using a Universal Joint Device With or Without Acrylic Cement" will be furnished to interested readers upon request.

RICHARDS MANUFACTURING COMPANY
1450 BROOKS RD., MEMPHIS, TENN. 38116, A.C. 901 • 397-4483
IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO. (416) 677-9744



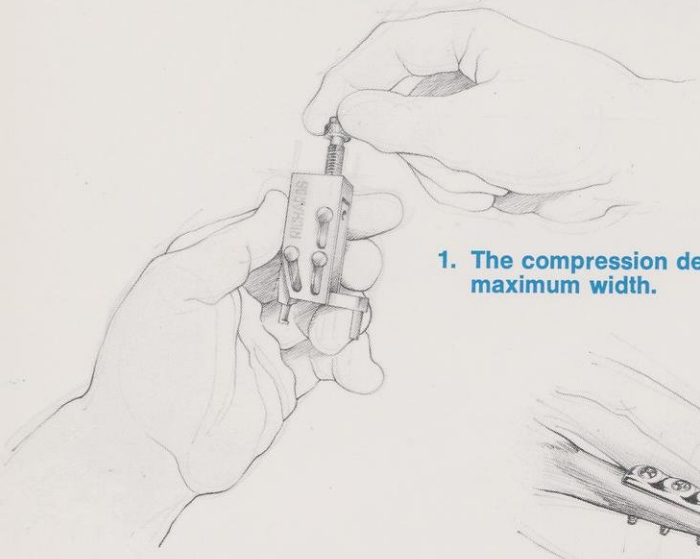
optimal fixation/minimal exposure

the RICHARDS-HIRSCHHORN Compression Bone Plating System

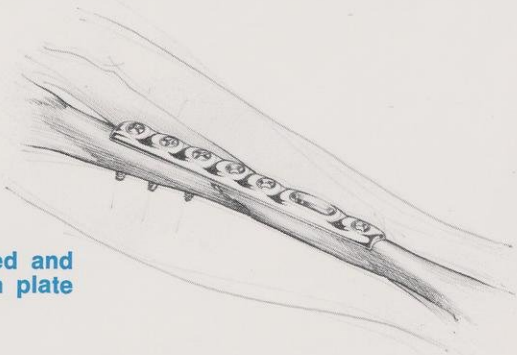
RICHARDS

the RICHARDS-HIRSCHHORN Compression Bone Plating System

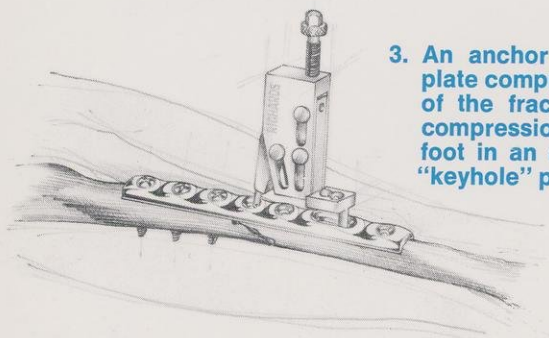
Surgical-Mechanical Technique



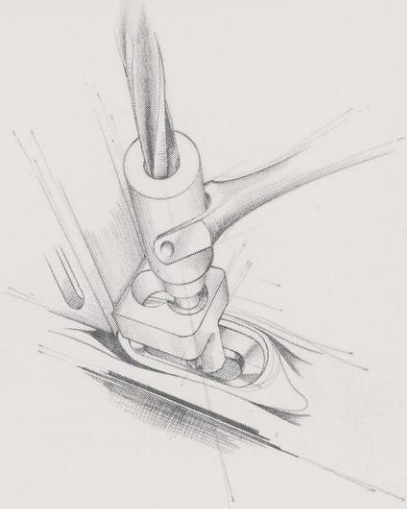
1. The compression device is expanded to its maximum width.



2. The fracture is reduced and aligned and the Continuous-Strength Hirschhorn plate is secured to one side of the bone.

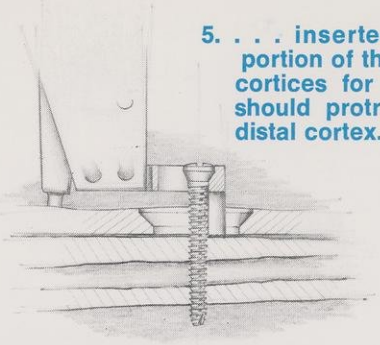


3. An anchor screw is placed through the plate compression slot on the opposite side of the fracture by placing the expanded compression device atop the plate with its foot in an appropriate screw hole and its "keyhole" positioned over the slot. Then . . .

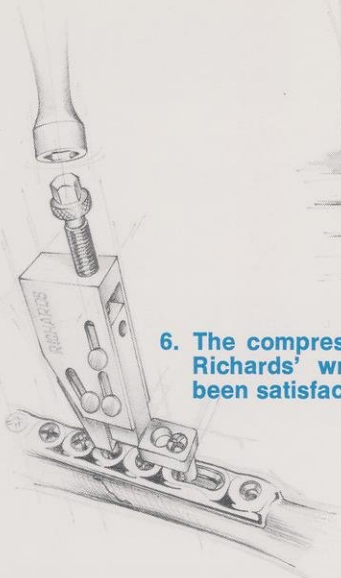


4. . . . the drill guide is placed in the countersunk (smaller) portion of the "keyhole" and a hole drilled through both cortices. A depth gauge inserted through the "keyhole" to the distal cortex will determine the proper length anchor screw required. The screw is selected and . . .

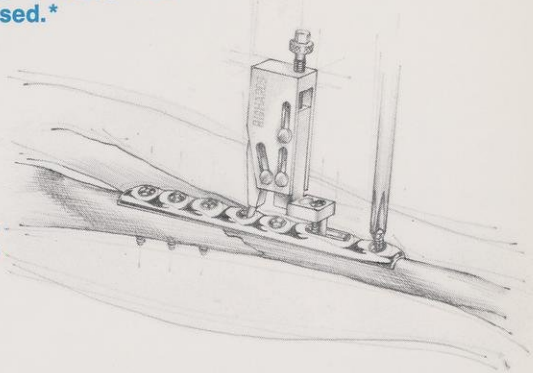
RICHARDS



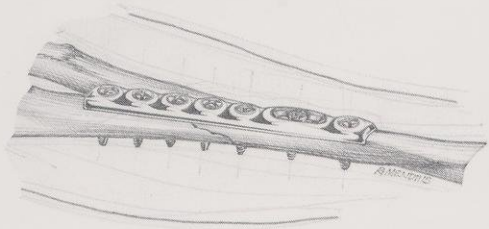
5. . . . inserted through the countersunk portion of the "keyhole" and through both cortices for a snug fit on the device. It should protrude about 1/8″ through the distal cortex.



6. The compression device is tightened with Richards' wrench until the fracture has been satisfactorily compressed.*



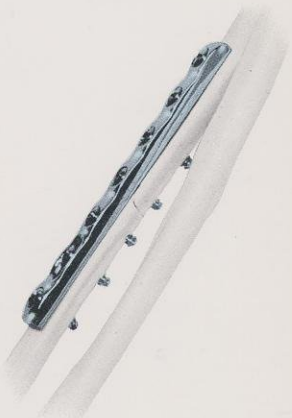
7. With the fracture compressed, holes are drilled through the remaining screw holes and screws are inserted.



8. The compression device is loosened. The anchor screw, then the compression device are removed. A hole is drilled through the screw hole occupied by the foot of the device and a screw inserted.
9. A final screw is placed in the hole left by removal of the anchor screw. Procedure complete.

*Compression need only be firm enough to achieve good approximation of fragments with care being taken not to "over-compress" the fracture.

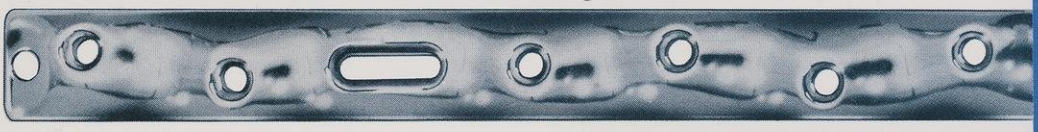
Compression bone plating by the Richards-Hirschhorn "over-the-plate" system substantially reduces the exposure associated with this type of procedure. The compression device is placed above and proximal to the fracture site, reducing the bone's tendency to bow or misalign as compression is applied. The anchor screw is placed through a compression slot in the central portion of the plate so that it holds the bone snugly to the plate at the point where compression occurs. Compressing force, precisely controlled by the surgeon, is transmitted directly to the bone fragments which are guided into proper apposition along the tracked plate undersurface. The anchoring screw hole is later fully utilized to assist in plate fixation.



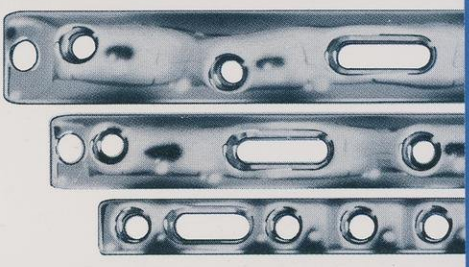
RICHARDS

the RICHARDS-HIRSCHHORN
Compression Bone Plating System

Hirschhorn Continuous-Strength Bone Plates*



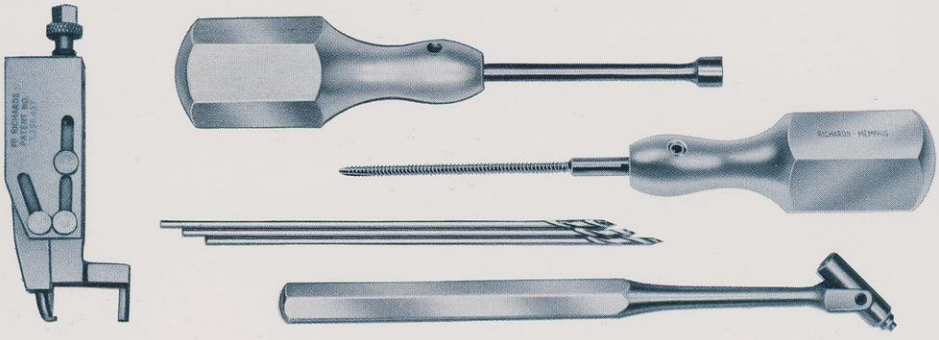
Hirschhorn Bone Plates—Precisely crafted of type 316L Stainless Steel*, these plates in four widths and a wide range of lengths incorporate Richards exclusive* Continuous-Strength design with tracked undersurface to provide superior strength characteristics and minimal periosteal contact.



Richards Buttress Threaded Bone Screws

Richards Buttress Threaded Bone Screws — with Radial Fluted Bechtol Points are available in both Hi-Torque and smaller diameter styles to complement extra-strength Hirschhorn Bone Plates with positive holding power provided by non-slip, flat topped threads and fortified shaft.

Richards-Hirschhorn Compression Device,* Compression Wrench, Bone Taps, Twist Drills and Drill Guides.

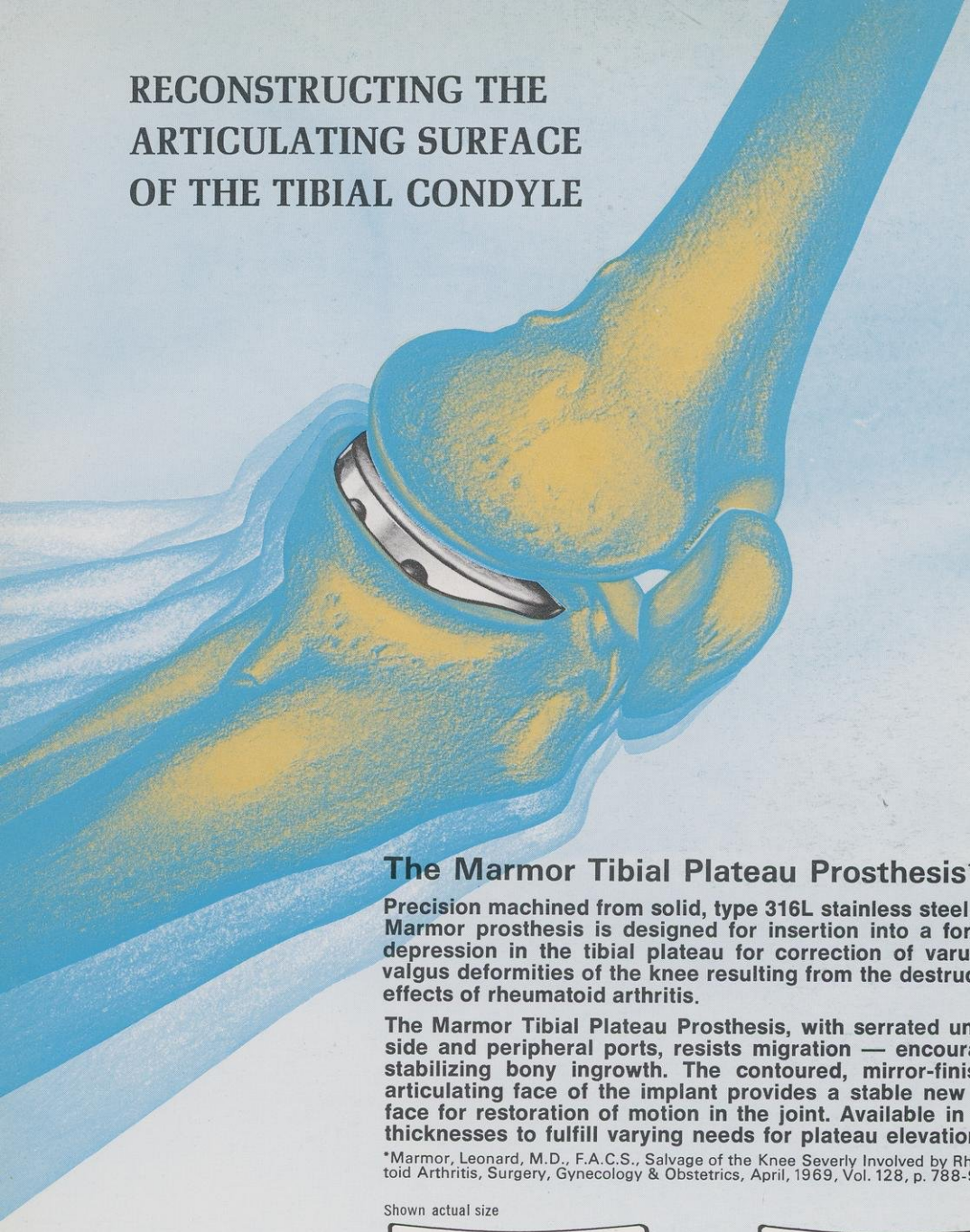


Richards Continuous-Strength Bone Plates U. S. Patent No. 3, 463, 148
Richards-Hirschhorn Compression Device U. S. Patent No. 3, 386, 437
All implants fabricated from type 316L Stainless Steel

NOTE: An eight-page guide to Hirschhorn Compression Bone Plating, implants, instruments and sets is available upon request from Richards.

RICHARDS MANUFACTURING COMPANY
1450 BROOKS RD., MEMPHIS, TENN. 38116, A.C. 901 • 396-2121
IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO. (416) 677-9744

RECONSTRUCTING THE ARTICULATING SURFACE OF THE TIBIAL CONDYLE



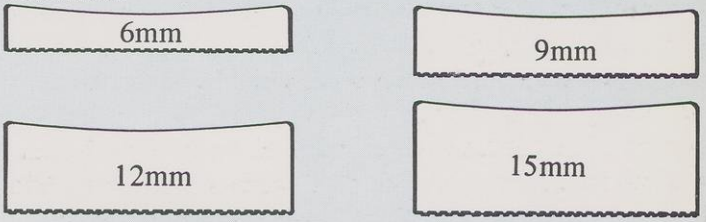
The Marmor Tibial Plateau Prosthesis*

Precision machined from solid, type 316L stainless steel, the Marmor prosthesis is designed for insertion into a formed depression in the tibial plateau for correction of varus or valgus deformities of the knee resulting from the destructive effects of rheumatoid arthritis.

The Marmor Tibial Plateau Prosthesis, with serrated underside and peripheral ports, resists migration — encourages stabilizing bony ingrowth. The contoured, mirror-finished articulating face of the implant provides a stable new surface for restoration of motion in the joint. Available in four thicknesses to fulfill varying needs for plateau elevation.

*Marmor, Leonard, M.D., F.A.C.S., Salvage of the Knee Severly Involved by Rheumatoid Arthritis, Surgery, Gynecology & Obstetrics, April, 1969, Vol. 128, p. 788-92.

Shown actual size



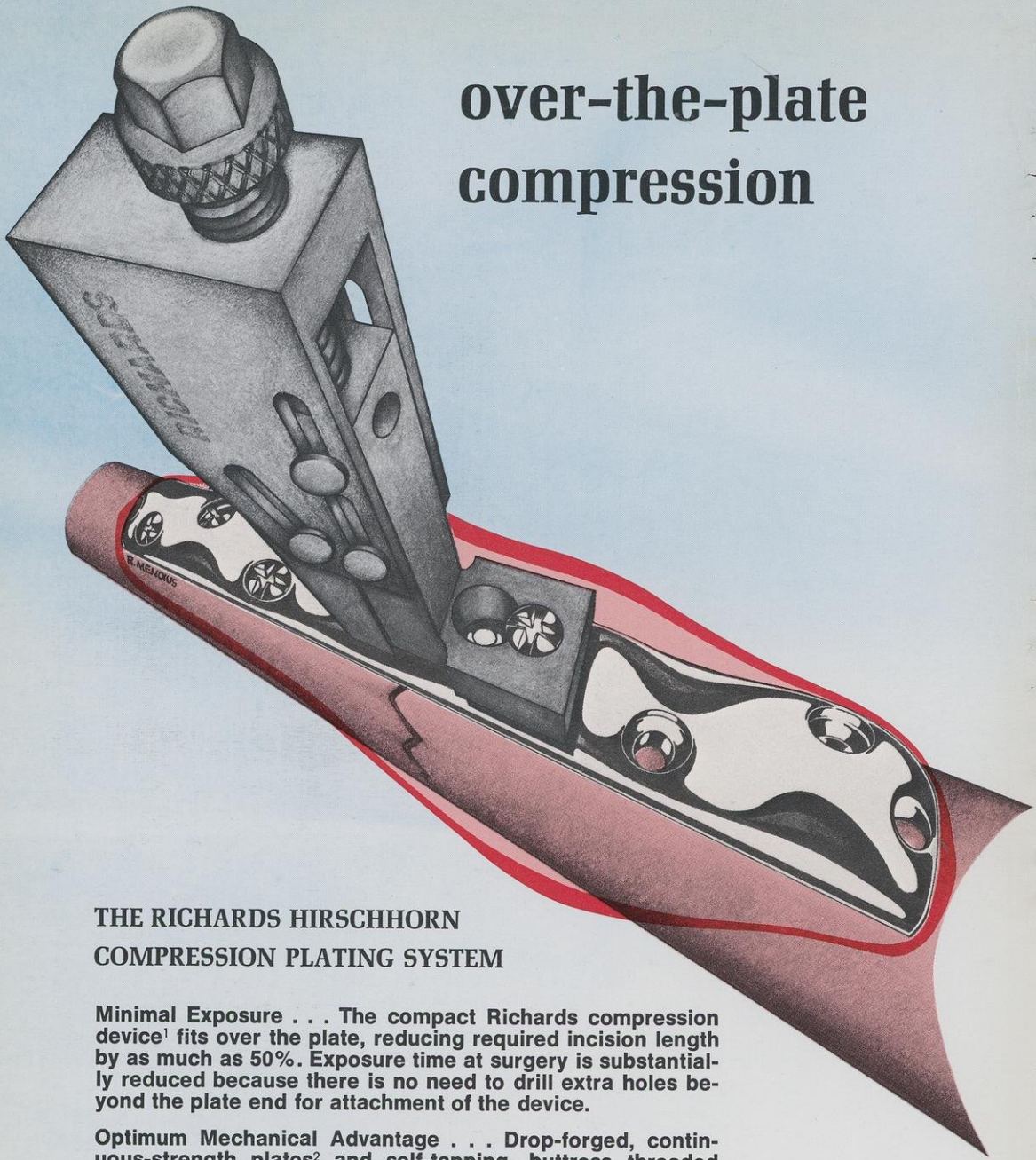
All dimensions, except thickness, remain constant

RICHARDS MANUFACTURING COMPANY

1450 BROOKS RD., MEMPHIS, TENN. 38116 A.C. 901 • 397-4483

IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO, (416) 677-9744

over-the-plate compression

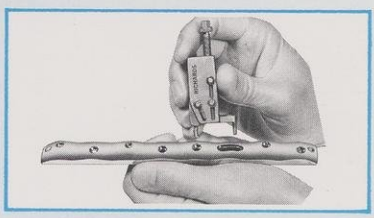


THE RICHARDS HIRSCHHORN COMPRESSION PLATING SYSTEM

Minimal Exposure . . . The compact Richards compression device[1] fits over the plate, reducing required incision length by as much as 50%. Exposure time at surgery is substantially reduced because there is no need to drill extra holes beyond the plate end for attachment of the device.

Optimum Mechanical Advantage . . . Drop-forged, continuous-strength plates[2] and self-tapping, buttress threaded bone screws achieve positive, secure fixation.

Application of compression force from above and just to one side of the fracture site aligns bone flush with the plate, minimizes bowing and displacement.



1. U.S. Pat. No. 3,386,437 (Type 316L stainless steel).
2. U.S. Pat. No. 3,463,148

RICHARDS MANUFACTURING COMPANY
1450 BROOKS RD., MEMPHIS, TENN. 38116 A.C. 901 • 397-4483
IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO, (416) 677-9744

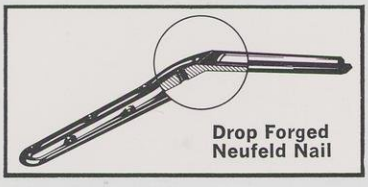
A Significant Improvement:

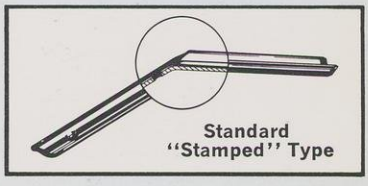
THE DROP-FORGED NEUFELD NAIL

Drop-hammer forging at white-hot temperatures has long been recognized as a superior method of obtaining strength and structural consistency in orthopedic implants. Now this same process, use-proven in implants such as the Moore Hip Prosthesis and the Jewett Nail, has been employed by Richards engineers in the manufacture of a superior Neufeld Nail.

The Drop-Forged Neufeld Nail provides the Orthopedic Surgeon with an implant that is substantially stronger than conventional types which are stamped from cold sheet steel. A heavier plate, nearly five times thicker at the driver hole, and reinforced nail combine for added strength throughout with very little additional bone displacement over standard styles.

As with all Richards type 316L stainless steel implants, the Drop-Forged Neufeld Nail is electro-polished for maximum tissue tolerance. Exacting controls and skilled craftsmanship in manufacture insure you of the highest quality always.

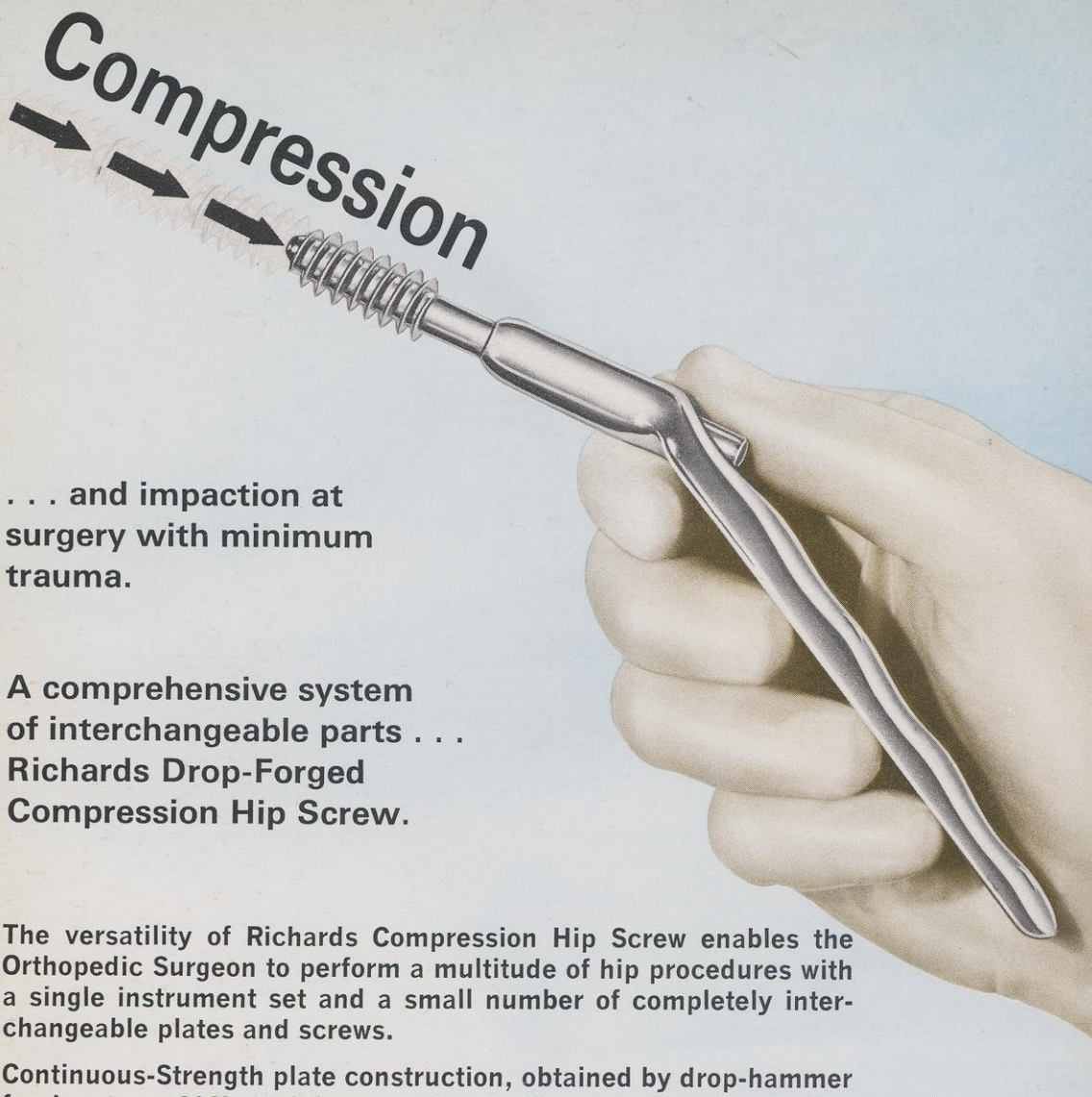




RICHARDS MANUFACTURING COMPANY

1450 BROOKS RD., MEMPHIS, TENN. 38116 A.C. 901•397-4483

IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO, (416) 677-9744



. . . and impaction at surgery with minimum trauma.

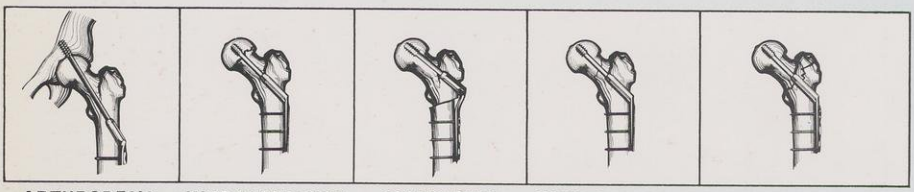
A comprehensive system of interchangeable parts . . . Richards Drop-Forged Compression Hip Screw.

The versatility of Richards Compression Hip Screw enables the Orthopedic Surgeon to perform a multitude of hip procedures with a single instrument set and a small number of completely interchangeable plates and screws.

Continuous-Strength plate construction, obtained by drop-hammer forging type 316L stainless steel at white-hot temperatures, increases strength at screw holes for greater reliability.

Sliding action permits firm, controlled impaction at surgery . . . maintains bone-to-bone contact throughout absorption process.

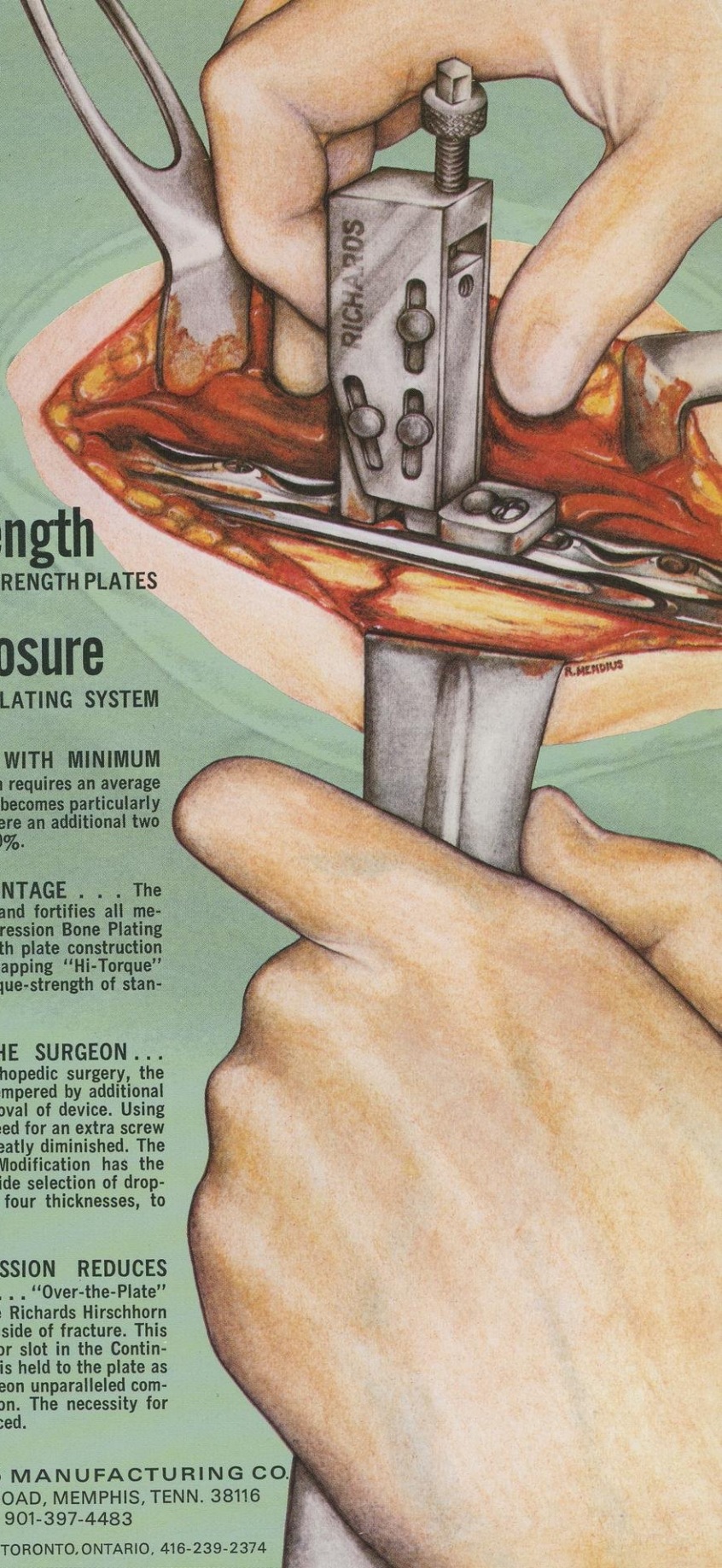
for these procedures



ARTHRODESIS | INTRACAPSULAR FRACTURES | OSTEOTOMY | INTERCERVICAL FRACTURES | INTERTROCHANTERIC FRACTURES

(for complete information write dept Ch)

RICHARDS MANUFACTURING COMPANY
1450 BROOKS RD., MEMPHIS, TENN. 38116 A.C. 901•397-4483
IN CANADA, RICHARDS SURGICAL LIMITED, 130 EAST DRIVE, BRAMALEA, ONTARIO, (416) 677-9744



optimal strength

DROP-FORGED CONTINUOUS-STRENGTH PLATES

minimal exposure

HIRSCHHORN COMPRESSION PLATING SYSTEM

COMPRESSION OF FRACTURE WITH MINIMUM EXPOSURE . . . Application of system requires an average of two inches less incision length. This becomes particularly notable in cases of forearm fracture where an additional two inches may increase wound length by 50%.

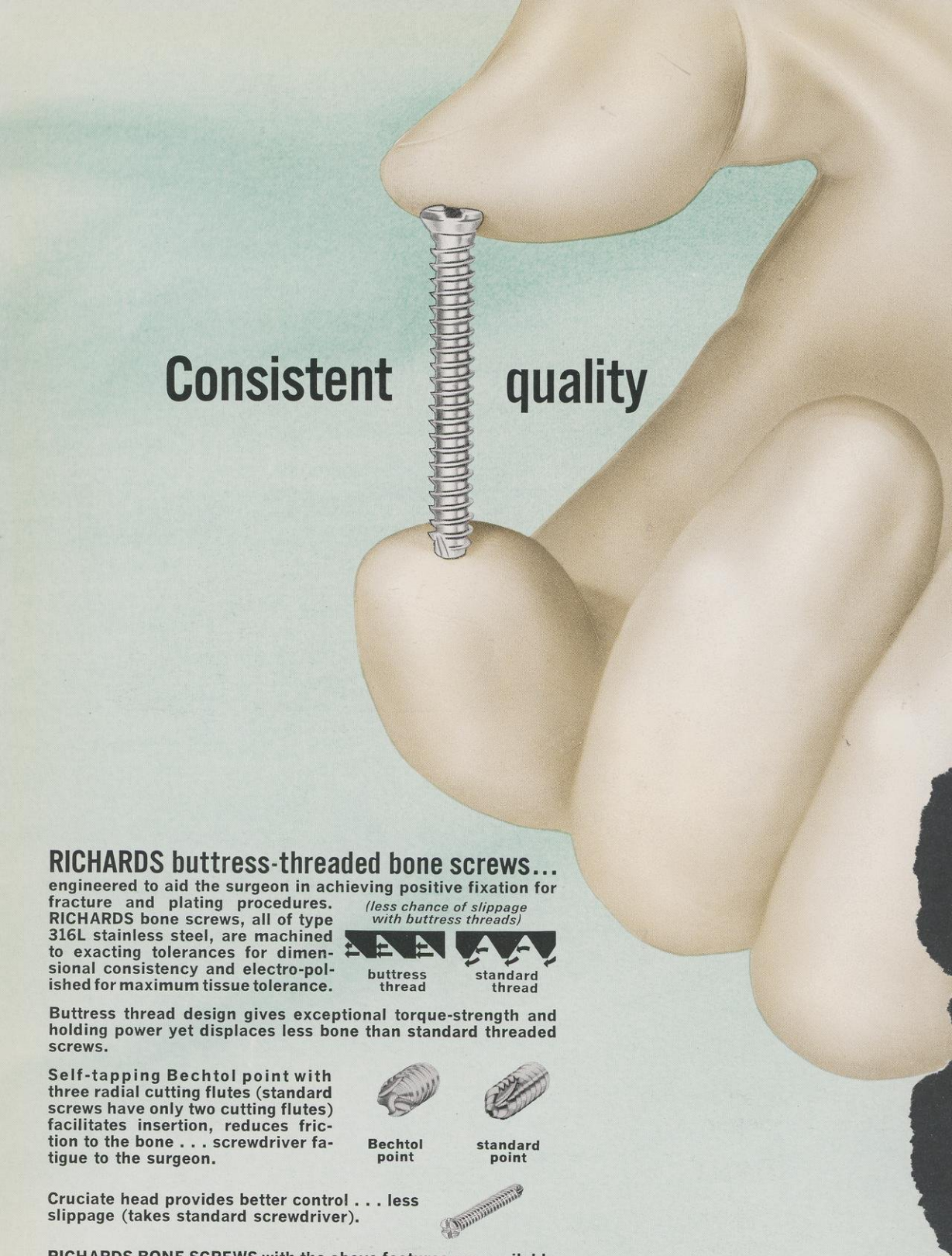
PTIMUM MECHANICAL ADVANTAGE . . . The irschhorn Modification incorporates and fortifies all me- anical advantages of Richards Compression Bone Plating stem. Drop-forged continuous-strength plate construction duces stress at screw holes. Self-tapping "Hi-Torque" ne screws have nearly twice the torque-strength of stan- rd screws.

SPECIAL ADVANTAGES TO THE SURGEON . . . When bone plating is indicated in orthopedic surgery, the decision to use compression may be tempered by additional time required for application and removal of device. Using the Hirschhorn modification, with no need for an extra screw beyond the plate, the time factor is greatly diminished. The surgeon using Richards Hirschhorn Modification has the dded advantage of choosing from a wide selection of drop- ged Continuous-Strength plates in four thicknesses, to every need.

VER-THE-PLATE" COMPRESSION REDUCES OWING AND DISPLACEMENT . . . "Over-the-Plate" ompression is achieved by placing the Richards Hirschhorn ompression Device above and to one side of fracture. This is accomplished through special anchor slot in the Contin- uous-Strength Hirschhorn plate. Bone is held to the plate as compression is applied giving the surgeon unparalleled com- pression control . . . ease of operation. The necessity for retaining devices is substantially reduced.

RICHARDS MANUFACTURING CO.
1450 BROOKS ROAD, MEMPHIS, TENN. 38116
A.C. 901-397-4483

IN CANADA, RICHARDS SURGICAL LTD. TORONTO, ONTARIO, 416-239-2374



RICHARDS buttress-threaded bone screws...

engineered to aid the surgeon in achieving positive fixation for fracture and plating procedures. RICHARDS bone screws, all of type 316L stainless steel, are machined to exacting tolerances for dimensional consistency and electro-polished for maximum tissue tolerance.

(less chance of slippage with buttress threads)

buttress thread | standard thread

Buttress thread design gives exceptional torque-strength and holding power yet displaces less bone than standard threaded screws.

Self-tapping Bechtol point with three radial cutting flutes (standard screws have only two cutting flutes) facilitates insertion, reduces friction to the bone . . . screwdriver fatigue to the surgeon.

Bechtol point | standard point

Cruciate head provides better control . . . less slippage (takes standard screwdriver).

RICHARDS BONE SCREWS with the above features are available in 1/4", 5/32", 9/64" and 7/64" diameters in a wide selection of lengths for every need.

RICHARDS MANUFACTURING CO.

1450 BROOKS RD., MEMPHIS, TENN. 38116, A.C. 901-397-4483

IN CANADA, RICHARDS SURGICAL LIMITED, 54 SIX POINT ROAD, TORONTO 18, ONTARIO, 416-239-2374