

**Technique employed in the Children's Orthopedic Department of the University Hospital / by De Forest Willard.**

**Contributors**

Willard, De Forest, 1846-1910.  
Royal College of Surgeons of England

**Publication/Creation**

[Philadelphia] : [publisher not identified], 1900.

**Persistent URL**

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183 Euston Road  
London NW1 2BE UK  
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*Technique Employed in the Children's  
Orthopedic Department of the  
University Hospital.*

BY

DE FOREST WILLARD, M. D.,

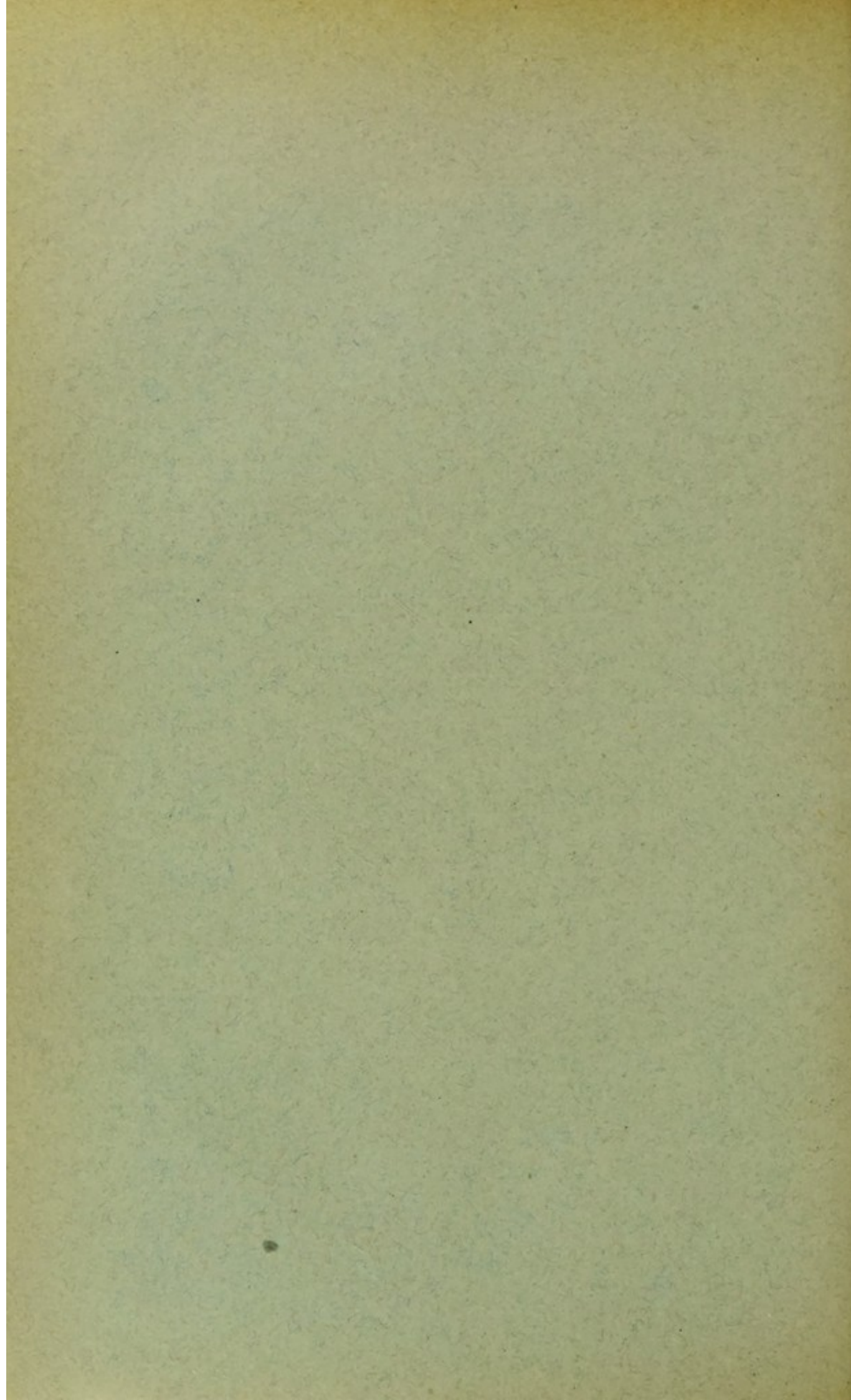
CLINICAL PROFESSOR OF ORTHOPEDIC SURGERY, UNIVERSITY OF  
PENNSYLVANIA.

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FROM

THE UNIVERSITY MEDICAL MAGAZINE,

SEPTEMBER, 1900.





TECHNIQUE EMPLOYED IN THE CHILDREN'S ORTHOPEDIC DEPARTMENT OF THE UNIVERSITY HOSPITAL.

BY DE FOREST WILLARD, M. D.,

Clinical Professor of Orthopedic Surgery, University of Pennsylvania.

PREPARATION OF PATIENTS FOR OPERATION.

When possible, the preparation of all operative cases should begin the afternoon preceding the operation, and should be carried out as follows :

1. Send specimen of urine to laboratory.
2. Give the patient a full bath, hot soap-suds, if the general health permits.
3. Shave the field of operation.
4. Scrub the field of operation as follows :
  - (a) With tincture green soap, hot water and soft brush for ten minutes. (Do not remove the epidermis to extent of showing blood.)
  - (b) With benzine and gauze pads for three minutes. Use turpentine in place of benzine if the part is very dirty.
  - (c) With 95 per cent alcohol and gauze pads for three minutes.
  - (d) With 1-1000 hot bichloride solution and gauze pads for three minutes.
  - (e) In old club-foot cases, commence several days in advance, by applying flaxseed-meal poultices to feet each night; then scrub with ammonia water, pare off callosities, and use soap, turpentine, alcohol and bichloride for three successive days, one hour daily.
5. In foot cases apply sterile gauze dressing thoroughly wrung out of warm bichloride solution (1-4000). Cover with oil paper and bind on the part.

NOTE:—In other cases, and especially in grave cases of joint suppuration, where loss of body heat is to be feared, apply *dry* sterile gauze, cover with cotton and bind on in place of the wet bichloride dressing.
6. A full dose of castor oil should be given eight hours before operation.

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### MORNING OF OPERATION.

1. Give breakfast of milk and beef-tea before 7.30 a. m. Small quantities of water are permissible afterward. If operation is in p. m., give hot beef-tea four hours previous.  
In young children, milk four hours previous.
2. Give a simple enema early in the morning, and again two hours before the operation.
3. Repeat the cleansing outlined under above heading, 4, using a broad gauze bandage to bind on the final dressing.
4. Encourage patient to void urine just previous to operation.
5. Send specimen of urine to laboratory.
6. In all feeble cases, especially of joint suppuration, where loss of body heat would be serious, cover entire body and limbs, except the area of operation, with cotton-wadding, held firmly in place by bandages.

### PREPARATION OF HANDS.

1. Scrub with tincture of green soap, several changes of hot water and nail-brush for five minutes. Before and during scrubbing, clean nails thoroughly.
2. Immerse in alcohol for one minute.
3. Immerse in a saturated solution of potassium permanganate for two minutes.
4. Immerse in a saturated solution of oxalic acid for two minutes.
5. Immerse in bichloride solution (1-1000) for two minutes.
6. Wear rubber or cotton gloves, sterilized.

### PREPARATION OF CLINIC.

1. The Clinic floor and sloping sides beneath seats must be flushed out the day previous to operations.
2. The Pit must be scrubbed the morning of operation.
3. All tables, sinks, the floor and sides of the Clinic are to be wiped on the morning of operation with cloths wrung out of a solution of bichloride (1-1000).
4. All pitchers, basins, and other receptacles used during the operation are to be soaked in a 1-1000 solution of bichloride for at least one hour.
5. The electric-heated mattress is to be placed on the operating table for every operation. The electricity is to be turned on



the mat at least fifteen minutes before the operation begins. The electric mat is to be covered with a sterile blanket and a sterile sheet.

Have ready for every operation the following articles :

1. Normal salt solution for hypodermoclysis and irrigations.
2. Sterile hypodermoclysis apparatus.
3. Oxygen and oxygen apparatus.
4. Fell-O'Dwyer apparatus for artificial respiration.
5. Hypodermic of strychnia sulphate gr. 1-50 in m. 20 of sterile water.
6. Irrigating apparatus.
7. Plenty of plaster bandages varying in width from one and one-half to four inches.
8. Lead and tin strips.
9. Raw cotton.
10. Muslin and flannel bandages. Gauze bandages.
11. Pulverized plaster of Paris.
12. Solutions for sterilizing hands as follows :
  - (a) Tr. green soap.
  - (b) 95 per cent alcohol.
  - (c) Large bowl of saturated solution of oxalic acid.
  - (d) Large bowl of saturated solution of potassium permanganate.
  - (e) Large bowl of bichloride solution (1-1000).
  - (f) Six nail-brushes sterilized in autoclave.
  - (g) Three nail-files.
13. For sterilizing patient :
  - (a) Gauze sponges.
  - (b) Small bowl of tr. green soap.
  - (c) Flask of sterile water.
  - (d) Flask of 95 per cent alcohol.
  - (e) Flask of bichloride solution (1-1000).

NOTE:—All solutions must be colored in order to avoid any chance of accidental poisoning. This applies to the Ward as well as to the Clinic.

Sterile water—clear.

Alcohol—red.

Bichloride—blue-green.

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NURSES' TABLE.

1. Four sizes of silk, sterilized in autoclave, and placed in a 95 per cent alcoholic solution of bichloride (1-1000).
2. Silk-worm gut.
3. Cumol catgut.
4. Chromicized catgut.
5. Sterile drainage tubes.
6. Sterile aristol (Thymol-diiodide).
7. Iodoform gauze.
8. Three finger-stalls.
9. Four pairs rubber gloves.
10. Four pairs cotton gloves.
11. Ten per cent and 20 per cent iodoform emulsion.
12. Nurse's tray :
  - (a) Scissors.
  - (b) Forceps.
  - (c) Two aneurism needles.
  - (d) Two Reverdin needles.
  - (e) Straight and curved needles.
  - (f) Needle-holder.
13. Sterile syringe.
14. Sterile hypodermic.