that when an evil government is swept away—even their good deeds tend to perish with them and only the evils live on. Throughout the war years apparently many countries improved their children's protective services and did much to apply preventive pediatrics on a large scale—so that as is true in other branches of medicine—the good accomplished in many respects outweighs the evils perpetrated on infants and children.

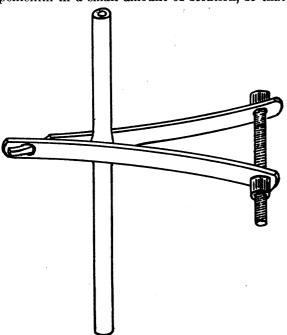
# CLINICAL and LABORATORY NOTES

# A CLAMP FOR CONTROL OF CONTINUOUS INFUSIONS

By L. C. Bartlett, M.D.

Favourable Lake, Ont.

A new clamp is described which permits easy and accurate regulation of continuous parenteral drip apparatus, such as continuous intramuscular or intravenous administration of penicillin or other solutions. The rate of flow can be easily regulated from 1 drop per minute to as fast as is desired. This permits (1) administration of any given amount of a drug such as penicillin in a small amount of solution, so that



the rate of administration does not exceed the rate of absorption, and (2) a steady and easily controlled rate of administration. A rate of 6 drops per minute from a Baxter drip bulb administers 500 c.c. in 24 hours. Other rates can be calculated accordingly.

This clamp was developed at Berens River Mines, Ltd., by Mr. Edward Donald, master mechanic, in conjunction with the author. It consists of two pieces of spring steel No. 19 gauge, ½ x 3", arranged in V-shape as shown, with a slot hinge arrangement at one end, and a fine thread screw at the other to force the blades together. It thus employs the principle of leverage, as shown. The clamp can be applied and removed over the tubing by taking apart at the hinge joint. It has given satisfaction in administration of penicillin to Indian patients in remote log cabins where only one daily visit was possible, and in such cases a regular rate of flow was easily maintained.

Thanks are due to Mr. David Halstead of the Engineering Department of Berens River Mines, for preparation of the drawing.

## LAURON IN RHEUMATOID ARTHRITIS

(A further report)

By Dean Robinson

Banff, Alta.

Injections of gold alone will not cure rheumatoid arthritis. Gold is just one of the essential forms of therapy. We cannot afford to neglect anything found useful in controlling the course of the disease. For instance, rest in bed, with no other form of therapy has a beneficial effect on rheumatoid arthritis. During this rest, the joints must not be left idle or in the most comfortable position, for they may lose their mobility and even become ankylosed. While the disease is in the acute stage, daily movements must be very carefully done to prevent adhesions. For the balance of the twenty-four hours the painful joints should be in temporary casts.

Rheumatoid arthritis is said to be a selflimited disease. However, we should be very happy when we are able to bring the disease to rest in six months, in place of six years with the resultant crippling and misery. During the six months while the disease is subsiding and the patient is in the hospital, we have an opportunity to prevent crippling and to correct slowly the deformity which has previously taken place. Thus, we see that rest in hospital is another form of essential therapy.

Hot mineral baths (where available) vaccine, vitamins and a nutritious diet should be used in all cases. Also when indicated iron and glandular extracts. Procaine and physostigmine with atropine may be used to counteract spasm. We must remember too, that arthritics are not immune to any disease which afflicts mankind.

Some rheumatoid cases remain active in spite of what may be done for them. When treatment is commenced one cannot say whether the case will be resistant or not. In fact, it may be months before we find that out. So, we try to use every form of therapy we know, right from the start. One should not say, "We will try gold and see what it will do. You may come to my office once a week." Too much valuable time

is lost in this way. You cannot get the sore joint quiescent too soon. Use every method you know. If gold alone will bring the disease to rest in six months, then gold with rest and other therapy will do the same job in half the time.

In this Journal (53: 279, 1945) a preliminary report was made on lauron, a new gold preparation\* for the treatment of rheumatoid arthritis. Since then lauron has been used more regularly and one is able to judge more clearly of its virtues.

An early report of 55 cases was given. All of these were treated with lauron. Forty cases (72.7%) showed a lowered sedimentation rate, i.e., responded to treatment.

In the present series 100 cases were treated with lauron. Of these 73 showed reduced sedimentation rates en masse to the amount of 988 mm., or an average of 13.5 mm. This agrees very well with our 1945 report.

One hundred cases were given myochrisine. Of these 78 showed reduced sedimentation rates to the amount of 1,083 mm. or an average of 13.8 mm. This shows an apparent slight improvement over the lauron series. However in the early part of the series lauron was used only for those cases who could not take myochrisine for various reasons.

The length of stay in the hospital was about the same in the two series but the amount of lauron was greater than that of myochrisine because the dosage was larger. Larger doses were used but may not have been necessary.

Thus, we have two forms of gold, both equally efficient but differing in toxicity. In the 1945 paper we stated that our task was to find an improved form of gold to overcome the danger of toxic reactions. We have found this product.

With other forms of gold, toxic reactions were always expected but could never be anticipated. In many cases treatment had to be discontinued. In some, the attack of dermatitis became so acute that the life of the patient was threatened. In some countries patients are invariably requested to sign a paper absolving the doctor from all responsibility for anything which might happen following the administration of gold. This was a bad start for the patient, who was already upset physically, mentally, and economically. Another responsibility was added to his shoulders. Arthritic patients should be as free as possible from worry and responsibility. This form of therapy now that lauron is available is no more dangerous than many others that we use, and we do not see why it is necessary to bother the already worried patient with something that should be our own responsibility.

#### CONCLUSION

Lauron, myochrisine and solganol are equally useful therapeutically in rheumatoid arthritis. However lauron is less toxic than the other two.

Change is sedimentation rate is not the only criterion of improvement as clinical improvement in itself is very important. The sedimentation rate may fluctuate with every little infection but steady clinical improvement is much more satisfactory.

Note.-Myochrisine and solganol are not toxic in every case but one cannot anticipate these reactions. In fact they may appear after the whole course has

been given and the patient has returned to his home.

At the Banff Mineral Springs Hospital, 270 cases treated with lauron have not shown one serious reaction, though much larger doses were used than with other forms of gold.

# VENEREAL DISEASE CAMPAIGN



## The Present Status of Penicillin in Syphilis Treatment

In view of the current wave of enthusiasm regarding the use of penicillin in the treatment of syphilis, an Editorial appearing in the May 1946 issue of The Journal of Venereal Disease Information would appear to be most appropriately timed. To emphasize the present status of this therapy, excerpts from this Editorial are presented.

"It cannot be repeated too often nor too emphatically that penicillin therapy of syphilis is still an experimental procedure. This is true because of the prolonged course of the disease and its tendency to recur after periods of latency, and applies with equal force to any new treatment, drug or procedure. Organized, co-ordinated methods of study and observation enlisting the help of clinicians, laboratories, and institutions undoubtedly speed up evaluation, but there is still a minimum period of 5 years of continuous observation on several thousands of patients which is absolutely necessary before final conclusions can be drawn."

The Editorial continues by enlarging upon the incomplete state of our knowledge concerning penicillin therapy, discussing the recent discovery that some penicillin seems to have become less effective in the treatment of syphilis. Scattered reports to this effect by various clinicians and other agencies interested in the treatment aspects of syphilis control, confirmed in experimental animals by responsible investigators, during February 1946, led to the conclusion that the situation should be

promptly appraised.

<sup>\*</sup> Supplied by Endo Products, Toronto.