

those of tetania parathyreopriva shows a very close correspondence. They bear the same relationship to tetania parathyreopriva that those following the administration of diphtheria toxin bear to the symptoms of true diphtheria. The conclusions arrived at are as follows :—

1. There is no direct interrelationship between the parathyroids and the thyroids. 2. There is no evidence that the parathyroids exercise a direct controlling influence on the central nervous system. 3. The symptoms of tetania parathyreopriva are not primarily due to decrease in any constituent of the body—e.g., calcium ions. 4. The symptoms are not due to an increase in ammonia or xanthin or β -iminazolyethylamine in the blood. 5. The symptoms are identical with those produced by the administration of salts of guanidine and methyl-guanidine. Direct evidence of the increase of these substances in the blood is given in the next paper.

Part V., Guanidine and Methyl-Guanidine in the Blood and Urine in Tetania Parathyreopriva and in the Urine of Idiopathic Tetany, by David Burns and J. S. Sharpe. Up to the present no estimations of the amount of guanidine or of methyl-guanidine in blood of normal animals have been recorded. Small quantities of both are known to occur in human urine. The amount of these bases in the urine is greatly increased in animals killed by anaphylactic shock or by burning. The methods used are fully recorded. The authors' results are summarised in the following table :—

Guanidine (and the Methyl-guanidine expressed as Guanidine) in mg. per 1000 c.c.

A. BLOOD.		Dogs.	Parathyroidectomy
Normal (average of 5)	1.0.		(average of 8) 8.7.
B. URINE.		Dogs.	Children.
0.25 (average of 6).		1.1 (average of 6).	
{Average of 5 individuals}		Idiopathic tetany (average of 3 cases, 13 analyses.	
8 analyses, 0.12.		Active tetany ... 0.58.	
		Latent tetany ... 0.38.	
		Recovery from tetany 0.12.	

There is a marked increase in the amount of guanidine and methyl-guanidine in the blood and urine of dogs after removal of the parathyroids and in the urine of children suffering from idiopathic tetany. Part VI., The Action of the Blood Serum of Animals in Tetania Parathyreopriva on the Skeletal Muscles of the Frog, by George M. Wishart. In certain cases the serum of parathyroidectomised dogs and cats acts upon the muscles of the frog in the same way as do dilute solutions of guanidine or methyl-guanidine. But the variations in the susceptibility or the muscles of different frogs render this biological test unreliable. Part VII.: A Comparison of the Influence on the Protein Metabolism of Parathyroidectomy and of the Administration of Guanidine, by David Burns. From his experiments the author concludes that the close similarity in the metabolic disturbances induced in the dog by removal of the parathyroid glands and by the administration of a salt of guanidine to a fasting animal supports the evidence already adduced in the previous parts that these two states are identical. Part VIII.: The Functions of the Parathyroids and the Relationship of Tetania Parathyreopriva to Idiopathic Tetany, by D. Noël Paton and Leonard Findlay. Reviewing the previous work and their own, the authors conclude that the parathyroids regulate the metabolism of guanidine in the body. By doing so they probably exercise a controlling influence on the tone of the muscles. Tetania parathyreopriva and idiopathic tetany are identical as regards their characters and metabolism, and, although the histological evidence is not conclusive, in all probability the parathyroids are implicated in the latter as in the former.

The Veterinary Review. Vol. I., No. 3. August, 1917. London and Edinburgh: Green and Son. Price 3s. 6d. quarterly.—In the *Veterinary Review* for August the editor, Dr. O. Charnock Bradley, has again put before the scientific reader a complete digest of all matters which concern the welfare of the animal world as regards its relation to medicine and surgery. It contains summaries of articles written in all civilised countries by numerous authors both medical and veterinary, and an original article on "The Transmission of Animal Trypanosomiasis in Northern Rhodesia by Blood-sucking Flies other than *Glossina*," by Captain Frederick Chambers, F.R.C.V.S., A.V.C. To the busy scientific man, whether engaged in laboratory or purely clinical work, a digest of this kind is of the greatest value, enabling him to keep in touch with all advances.

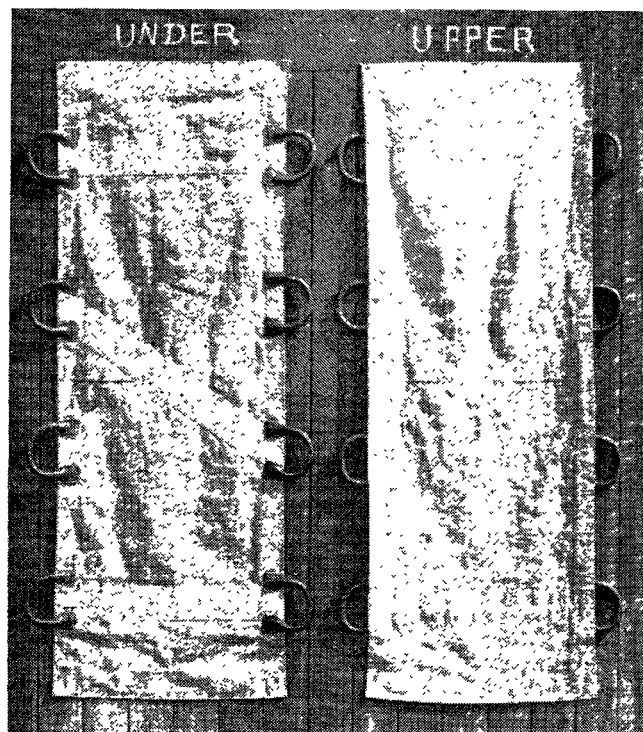
New Inventions.

DEVICES FOR MOVING PATIENTS.

A DESCRIPTION is given below of two little inventions I have adopted for the use of military patients here, with gratifying results.

1. *Carrying device.*—The canvas (Fig. 1) is passed under the patient and two nurses, orderlies, or porters on each side take hold of two handles each. At the word "Lift" the patient

FIG. 1.

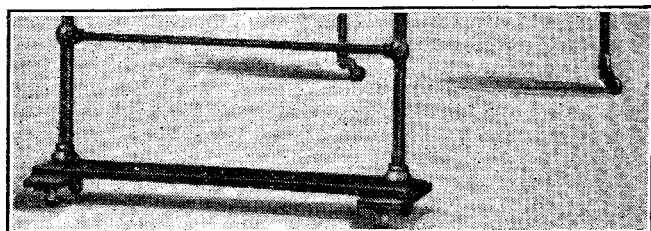


The carrying device.

is lifted bodily on to the wheeled stretcher, taken to the theatre, and lifted on to the table. After the operation he is carried back in a similar way. The canvas is removed before he comes out of his anaesthesia and it is put under the next case for operation. In this hospital, where we have over 500 wounded, I find a stretcher for each ward is enough. The village saddler makes them for 6s. 6d. When not in use they are hung by one handle across the anaesthetic room. It is possible to move a patient, however badly wounded, from the bed to the operating table and back again without any handling of his person, hence saving pain, &c.

2. *The trolley.*—The ends of the beds have no castors. The bed end is raised, the trolley put in position under the end of the bed, and the two feet of the bed drop into the cavities in the trolley, as shown in Fig. 2. When the bed

FIG. 2.



The trolley in position.

reaches the desired position the end is raised, the trolley kicked out of position, and used for the next case. The trolley can be wheeled anywhere provided the wheels do not sink into the soil with the weight of the bed. The cost, wheels included, is 3s. 9d. With few exceptions we wheel every bed into the balconies or grounds for all bedridden cases early in the morning, and at sundown they are wheeled back. The time occupied for this is on the average 40 minutes. One trolley is supplied to each ward of 30 beds.

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