On admission to the hospital a small hole was seen about the middle of the humerus. Pressure on shoulder and under part of arm caused the discharge of a considerably quantity of clear serous fluid. On the evening of the 1st of January a second sinus opened about half an inch above the first, which discharged a quantity of pus mixed with serous fluid. On probing, rough bone was felt at upper end of humerus.

## Selected Articles.

## THE TREATMENT OF CHRONIC RHEU-MATISM.

Dr. J. C. Peters, in a paper read before the N. Y. Academy of Medicine, and published in *Med. Record*, said: Almost all rheumatisms are connected with an excessively acid condition of many of the secretions and excretions, including the saliva, perspiration, and urine; even the chyme and blood are less alkaline than they should be. Next is the excessive preponderance of fibrin in the blood, and the great and early destruction of red blood-globules.

Alkalies form the natural basis of the treatment of almost all rheumatisms, and the first question which arises is whether the potash or soda salts shall be used, or both. As the phosphates and potash salts naturally predominate in the red corpuscles and in the formed tissues, while the chlorides and soda salts are most abundant in the serum and plasma, and in all the infiltrating fluids of all the organs of the body, both potash and soda may have to be used; and they will so aid and compensate each other that neither will have to be given in excess. In chronic rheumatisms Dr. Peters preferred the milder and more tonic soda and potash salts, such as the phosphate of soda, etc. This is a good and mild laxative when purgatives are required; it also lessens the acidity of the mouth, stomach and bowels, which is apt to be present, renders the contents of the thoracic duct and the blood more alkaline, and makes the urine and perspiration alkaline. It also lessens the quantity of fibrin in the blood. It is a cooling and slightly antipyretic remedy, and may be used in strong or saturated solution as a local application to chronically swelled joints. In chronic arthritic rheumatism Charcot prefers the carbonate of soda, of which he gives from seven to ten drachms a day, even to old and feeble women, and says he has never seen anæmia or any dissolution of the blood caused by it; on the contrary, his patients even grew stouter and stronger, possibly from the better digestion of sugar, starch and fat which is caused by this and other alkalies. It

also aids in the destruction of an excess of fibrin in the blood, and helps the liver in its great work of destroying fibrin.

Phosphate of soda is a gentle and pleasant remedy, which may be given in about the way that citrate of potash and Rochelle salts are usually given; the latter in half or one ounce doses when laxation is required, and either in one or two drachm doses when their alkaline effects are more desired. It neutralizes all acids, even that which is abnormally present low down in the large bowels, and moderates the excessive acidity of the normal acid phosphate of soda in the urine, and then helps to keep the uric acid and the other urates in solution.

But potash is the natural alkali of the red blood-globules, of the muscles, fibres, and all other formed and solid tissues; and citrate of potash, and even Rochelle salts, which is a tartrate of soda and potash, may reach not only the serum of the blood, but the blood-globules and the parenchymatous structures, when rheumatism is firmly lodged in the latter.

Benzoate of soda is another non-depressing soda salt, although it is somewhat antipyretic when given in large doses. It is a solvent of uric acid, increases the elimination of urates in rheumatic lithiasis, and seems not only to convert uric acid into hippuric, but also to liberate a portion of the products of disassimilation in the form of soluble hippuric acid instead of insoluble uric. In delicate and sensitive patients benzoate of soda may be given with aromatic spirits of ammonia, thus:

RSodii	benzoatis,						3 vi.	
Spts.	ammon. aron	nat	٠,				3 vj.	
Spts.	myristicæ,			•			3 vi.	
Spts.	chloroformi,			•	•	٠.	3 ij.	
	gaultheria,						3 vjM	
\$	S1G.—3 j. to ;	3 ij	. ir	ı w	ate	r.		

The hippurate of soda has been suggested lately in doses of five to thirty grains. It tends to produce soluble urates. A favorite prescription with Granville is:

R-Sodii hippuratis,						3	ij.
Glycerini,						3	vj.
Aq. cinnamomi,							
Sig.—3 ij. to 3 viii,	t	hree	t	ime	s a	da	y.

The tauro-cholate of soda also holds uric acid in solution, and is said to render the stools characteristically rich in bile without causing purging. The usual dose is three to six grains, and it is said to be most useful in obese rheumatic patients, in whom the excess of fat slowly melts away. It is doubtful whether it is more useful than purified ox-gall.

The salicylate of soda is only useful in the acute aggravations of chronic rheumatism. It does not destroy the rheumatic element in the blood.