and, through the non-conductive power of coal, they succeeded. The men had lighted candles up to within two days of their deliverance. Sleep was irregular and disturbed. Water was swallowed in large quantities.

Tabulated Results of Detailed Observations.

At Pit's Mouth.	Temp.	Pulse.	Resp.	Regimen, etc.
Friday, 5 P.M.				
John Thomas (a)	96.1	84	24	Coffee, beef-tea, milk, and strong soup
David Hughes (b)	97.1	84	16	
Moses Powell (c)	98	96	28	
George Jenkins.	96	84	20	
D. Jenkins (d) ..	98	96	21	
Saturday (noon)				
J. Thomas (e) ..	98.4	80		Ditto. All were free from pain
D. Hughes	98.4	72		
M. Powell	98.8	80		
G. Jenkins (f) ..	99.1	60		
D. Jenkins	98.5	60		
Sunday, 6 A.M.				
J. Thomas	97	98		Ditto. ditto
D. Hughes	98.2	82		
M. Powell	98	72		
G. Jenkins	98.3	70		
D. Jenkins	98.1	56		
Sunday (noon).				
J. Thomas	98.2	105		Ditto. ditto
D. Hughes	98.2	72		
M. Powell	96.2	72		
G. Jenkins	98	68		
D. Jenkins	97.2	56		
Sunday, 11 P.M.				
J. Thomas	98.3	92		Beef-tea, except J. Thomas—milk and gruel
D. Hughes	97.2	74		
M. Powell	96.2	72		
G. Jenkins	98.1	66		
D. Jenkins	97	58		
Monday, 6 A.M.				
J. Thomas	97.2	82		All spent a good night. Tongues very much improved. Dinner—beef-steaks and potatoes; tea—coffee, with eggs mixed, bread and butter; supper—gruel
D. Hughes	97.3	74		
M. Powell	96.3	76		
G. Jenkins	97.3	66		
D. Jenkins	97.1	56		
Tuesday, 6 A.M.				
J. Thomas	97.4	84		Good night: all complained of pains in feet. 8 A.M., breakfast—milk & bread; 12 (noon), luncheon—beef-tea; 4 P.M., dinner—beef, potatoes, and greens; 7 P.M., tea; 9.30 P.M., supper—half-pint of gruel
D. Hughes	97.3	72		
M. Powell (g) ..	96.3	70		
G. Jenkins	98	62		
D. Jenkins	97.2	56		
Wednesday, 6 A.M.				
J. Thomas (h) ..	97.2	56		Milk and gruel diet. Half an ounce of castor-oil for each; and belladonna liniment to be rubbed well into the feet
D. Hughes (i) ..	96.4	76		
M. Powell	98	78		
G. Jenkins	98.2	72		
D. Jenkins	97.2	68		
Thursday, 6 A.M.				
J. Thomas	98.2	70		Bowels of all freely opened; feet scarcely so tender; tongue cleaning; appetite improving; strength increasing. Breakfast—bread and milk; lunch—beef-tea, one pint; dinner—mutton-broth, one pint; tea—tea, bread and butter, supper—gruel
D. Hughes	96.3	56		
M. Powell	97.2	70		
G. Jenkins	97	66		
D. Jenkins	96.2	62		
Friday, 6 A.M.				
J. Thomas	97.3	72		Good night; bowels free; feet better, except Powell and G. Jenkins
D. Hughes	98.1	86		
M. Powell	97.2	62		
G. Jenkins	93	88		
D. Jenkins	96.3	68		
Saturday, 6 A.M.				
J. Thomas	97.3	72		Powell and G. Jenkins very restless night, owing to pain in feet; no swelling; neuralgic pains; bowels open, except Powell. Up and dressed to breakfast on my visit at 9 A.M.—R. Lin. bellad. ʒij; lin chlorf. ʒi. Fiat linimentum. To be rubbed in well.—R. Pilulæ hydrarg. gr. ii; pulv. ipecac. gr. i; pilulæ rhei co. gr. ij. Fiat pilulæ. One every night for each
D. Hughes	97.1	82		
M. Powell	97.3	68		
G. Jenkins	98.1	64		
D. Jenkins	96.4	68		

a. At 10.30 P.M., passed four ounces of urine, highly charged with lithates; no albumen. I had intended to make a more exhaustive analysis, to ascertain specific gravity, amount of urea, etc.; but unfortunately my instructions not to remove the urine were forgotten by the nurses in charge.

b. Bowels relieved; eight ounces of black and shaped fæces.

c. Passed ten ounces of urine, highly charged with lithates; no albumen. Bowels relieved; eight ounces of black and shaped fæces.

d. Passed ten ounces of urine, highly charged with lithates; no albumen.

e. Bowels acted for the first time about midnight; fæces about eight ounces, dark, not shaped.

f. Bowels acted about 1 A.M.; fæces eight ounces, dark and shaped.

g. Bowels open for the first time since liberation.

h. Bowels confined.

i. Had a very restless night.

J. Thomas, however, drank but little. The bowels of the men were relieved on Wednesday, April 11th, and only once afterwards during their incarceration. J. Thomas, however, suffered from diarrhoea. Urine was passed frequently, and in small quantities, accompanied at the latter period of their confinement with a very fetid odour, which made the spot used as an urinal very disagreeable. The feeling of thirst increased as that of hunger diminished. J. Thomas became restless and delirious, and with difficulty could be restrained. D. Jenkins also became delirious towards the end of the period. A general tendency to drowsiness appeared to seize the men. D. Jenkins was the only one who took a portion of the candle, which he did in the form of pills. The rest could not get beyond the first stage of tasting it. When the water advanced in the stall on the morning of the rescue, all except G. Jenkins and Moses Powell retreated to a small hole in the face of the workings and above the reach of the water. The necessity of communicating with the rescuers compelled these two men, as the strongest, to stand or rather bend in the water, which had risen to their knees. All suffered more or less from neuralgic pains in their feet, especially the two mentioned. It should be remembered that these men were cooped up in a cavern only three feet and a half high, and with a floor damp from constant water-droppings. In the case of Jenkins and Powell, who so generously and heroically allowed their companions to retreat to a place of comparative safety, each was bending in this cave of Stygian darkness with nine inches of water around them, which they believed to be gradually rising only to drown them inch by inch before effective help could save them. In this view, the pains in the feet are explicable.

Notwithstanding the imminence of death, each was hopeful that he would be permitted to see the light and feel the air of Heaven again. Considering the adverse conditions, which are almost too painfully horrible in their ghastly grimness to be realised, it is extraordinary that the poor fellows, who are now on the fair road to convalescence, could have battled with their fears, with deprivation of food, and with constant chill in an atmosphere of 25 lbs. to the inch above the normal pressure, for two hundred and fourteen hours so successfully as they appear to have done.

Particulars as to Condition of Health previously to Accident.—On the morning of the accident, each took for breakfast bread, butter, and tea; and with him, for luncheon, half a pound of bread with cheese.

Moses Powell, aged 30, single, lives with his mother. His height is 5 feet 6¼ inches; weight, 140 lbs. He is dark, of a phlegmatic temperament; has always enjoyed good health; does not remember having had a day's illness. He is intemperate.

George Jenkins, aged 32, widower; height, 5 feet 5¼ inches; weight, 160 lbs. He is light, of a quick temperament. His health has been good, except that about eleven years ago he was subject to fits, which lasted for three years. He is very temperate.

David Jenkins, aged 40, married; height, 5 feet 4¾ inches; weight, 130 lbs. He is dark, of a rather nervous temperament. He has had a dry troublesome cough for about three years. His health has been generally good. He is very temperate.

John Thomas, aged 26, single; height, 5 feet 8 inches. He is fair, of a decidedly sanguineous temperament. He has had no serious illness. He is the son of scrofulous parents, is very deaf, and has an impediment in his speech. He is quiet and steady.

David Hughes, aged 16; height, 5 feet 1¾ inches; very slight. He has had scarlet fever and measles. He is a delicate boy, subject to cough and shortness of breath. He was in his usual health on the morning of the accident.

The men are now able to get about and dress, and are rapidly becoming convalescent. The pains in the feet are much relieved, though still a source of inconvenience to Powell and Jenkins. There is no indication of cough, or difficulty of breathing, or pain in the chest, in any of the invalids.

All have gone to their respective homes.

A FORM OF BURSAL ENLARGEMENT.*

By A. W. MAYO ROBSON, L.R.C.P.Lond., M.R.C.S.,
Demonstrator of Anatomy at Leeds School of Medicine.

THE cases concerning which I purpose making a few remarks are one of subacute and another of acute inflammation of the bursa situated beneath the ligamentum patellæ. That they are of great rarity I do not for a moment consider, since within a few weeks two such cases have come under my personal observation; but, as I cannot find an account of any similar ones in the ordinary surgical works, I con-

* Read before the Leeds and West Riding Medico-Chirurgical Society.

sidered I should perhaps not be presuming too much on your time to bring them before your notice.

The subacute case occurred in a clergyman aged 30, who, being of a weakly constitution and being threatened with phthisis, had resided abroad for a short time, after which his health had been moderately good up to a week before consulting me, when he began to have pain in front of the right knee on kneeling and slight stiffness on walking. When I saw him, there were slight heat and fulness beneath the right patella, and pain on pressure over the tibial tubercle or immediately above that prominence. I acupunctured the painful region, with the effect of giving great relief. He resumed his duties, but consulted me again a week afterwards, saying the symptoms had returned and the inconvenience in walking was even worse than before. I found marked swelling between the patella and tibial tubercle, on each side of the ligamentum patellæ, which structure seemed so to constrict the enlargement as to produce two distinct sacs. Fluctuation could, however, be distinctly felt from one to the other. The tenderness remained as before. There was no swelling above or in front of the patella. On walking, the leg was kept extended, flexion producing great pain. I ordered absolute rest in bed, and blistered the front of the swelling. After the blisters had healed, iodine was applied every night. After a fortnight, he was able to walk, and was well in a month.

The acute case occurred in a miner aged 15, who had been jammed against the pit-side by a small iron truck, a sharp angle of which had hit him beneath the left patella. He had great difficulty in limping home, a distance of a mile. On my seeing him, I found a swelling presenting the same characters as the former case, with pain on movement and tenderness beneath the patella; but in addition there were heat and redness over the swelling. I ordered absolute rest, leeches, and warm fomentations for the first day, and afterwards evaporating lotion. He made a rapid recovery and was well in ten days.

The points to which I would draw your attention are: 1. The fact of the cause being mechanical in both cases; in the subacute one being due to the act of kneeling, and in the acute to the effect of a direct blow. 2. As regards the diagnosis, there was no difficulty, since the absence of swelling above or at the sides of the patella proved there was no joint-effusion, and the absence of enlargement superficially to the patella proved that it was not due to swelling of the ordinary bursa patellæ. These negative symptoms, combined with the presence of a constricted fluctuating swelling situated between the lower end of the patella and tubercle of the tibia, could be, I think, set down to nothing else than effusion into and enlargement of the bursa situated beneath the ligamentum patellæ.

CLINICAL MEMORANDA.

FOREIGN BODIES IN THE RECTUM.

THE recent publication in the JOURNAL of some cases of foreign body in the rectum induces me to mention two of this class which occurred within a fortnight in my own practice. In October last, a medical friend sent for me, saying that he had been suffering great agony all day from some sharp body—he thought a fish-bone—which was just within reach of his finger in the rectum. He was easier when walking than sitting. On inserting my finger into the bowel, I could distinctly feel the cause of his suffering half-buried in the mucous membrane; but, owing to the intense spasm of the sphincter, I was unable to remove it without the speculum, on the introduction of which the glittering head of a pin shot into the split. I readily removed it with a forceps.

Within a fortnight afterwards, I was sent for by a gentleman living at some distance in the country, saying that he had a bad attack of piles and was suffering severe pain, especially after the bowels were moved and on motion. On seeing him, from the fact of the pain being so severe, agonising in fact at times, and having the other case fresh in my memory, I had my doubts about the piles, mentioned to him the pin-case, and said I would not be surprised if his case were a similar one. My surmise proved correct. On introducing my finger, I felt a polygonal flat body, which, on removal with the aid of the speculum, proved to be a small portion of the breast-bone of a snipe, having very sharp angles and edges, which easily accounted for the intense pain. The mucous membrane in both cases was in a state of vivid vascularity.

It is curious that during five years' practice I had not a single case of the kind, and that these two occurred within so short a space of time; but I believe most medical men have not unfrequently an analogous experience.

THOMAS DRAPES, Enniscorthy, Ireland.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SACCHARATED IODIDE OF IRON.

UNDER this title, Messrs. Ferris, Boorne, and Co., of Bristol, have introduced an elegant preparation of this useful salt, which can be prescribed in powders, and, when mixed with water, will be readily taken by delicate children and others, by whom it would appear to be easily assimilated; thus, a medical friend informs us that he has exhibited it in a case of leucocythæmia, and in one of extensive scrofula—where other tonics had been rejected—with marked benefit. It has also been found a valuable adjunct in the successful rearing of infants by the bottle.

THE SAMARITAN'S INVALID BEDSTEAD.

THE manufacturers have brought under our notice a very ingenious form of invalid bed, which seems to have a great many advantages for the use of patients suffering from acute disease, as well as for chronic and bedridden patients. One speciality of this bedstead is that the in-

valid may readily be placed in a comfortable position, and for the most part the adjustment of the position is under his own control with a very slight exertion. Thus, by pulling a strap on the other side of the bed, two-thirds of the bed is raised naturally, leaving one-third unaltered, but slightly tilting the patient on one side or the other, and forming a sort of comfortable sofa. This movement also enables the bed-clothing to be changed without moving the patient. The head part of the bed is easily raised to any angle by the patient turning a wheel within reach. By a similar arrangement, the bed is converted into a sort of bed-chair at various angles; and an excellent commodious movement completes the

necessary arrangements for bedridden patients with greater ease and accuracy than any other bedstead with which we are acquainted. Ingenious provision is made for providing table, reading-desk, and foot-rest, the whole of these conveniences being attached to the bed in such a manner that they may be readily brought forward or pushed back. On the whole, this bedstead is a very luxurious and complete contrivance, and it is less costly than such arrangements of similar completeness and perfection usually are. It is made by the Invalid Patent Bed Company, Limited, Angler's Lane, Kentish Town, London.

THE NORWICH SLOW COMBUSTION-GRATES.

SOME time ago, Mr. J. J. Mechi, of Tiptree Hall, and "A Country Parson", suggested in the *Times* a reform in fire-grates, and described a grate which effects a great economy in the use of coal, at the same time that it effectually heats the air of the room and assists in ventilating. Although differing a good deal in respect to the construction of the grate from ordinary fireplaces, it does not necessitate any change in the stove itself in respect to outward ornamentation. The fire rests on firebrick level with the floor, and is enclosed in a trough with firebrick sides and back 16 inches deep and 14 inches wide; $\frac{3}{4}$ inches from back to front at bottom, and $5\frac{1}{2}$ inches at top. It gives thus a thin