of starch, that I have been enabled to unravel one of the mysteries of assimilation. I took some glass tubes, having an internal diameter of two centimetres, by ten or twelve centimetres in length, and I closed one of their extremities with a portion of the small intestine of a sheep, conveniently fixed. I then introduced into one of these tubes some distilled water holding crude fecula suspended in it, and I attached this little apparatus, surrounded by a pierced cork, to a receiver, for the space of one hundred hours. I examined chemically the liquid which passed through the animal membrane and convinced myself that at no period of the experiment did this liquid contain a particle of starch or sugar. The same experiment performed with barley, coarsely pulverized, furnished results absolutely similar.

I repeated these experiments, replacing the distilled water, with an equal quantity of human saliva, and ascertained that after twelve hours' contact a certain proportion of starch had filtered through the organic visceral tissue, but modified, having lost its characteristic properties, tincture of iodine producing no change in it, and potass, with the assistance of heat, causing a marked brown colour, and containing in solution one or more matters, capable of immediately changing the bluish green hydrate of deutoxide of copper into red protoxide. This liquid then behaved with potash and oxide of copper exactly in the same manner as sugar of starch or glucose. At the end of one hundred hours the amylary transformation was very marked, and quite sufficient to explain the absorption of feculent aliments in animals which are habitually fed on them.

These results evidently shew, that without animal diastase, starch is not only incapable of assimilation, but also of absorption, since it is only the starch which has become dextrine and glucose that passes through the membranes, and the starch held in solution, and not decomposed, remains on the surface.

(To be continued.)

CASE OF DISLOCATION OF THE THIGH BACKWARDS INTO THE ISCHIATIC NOTCH.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

If you think the following case of sufficient interest to merit a place in your Journal, I shall be glad if you will insert it.

I remain, Sir,

Your obedient servant,

WILLIAM EDWARD BODDINGTON.

Chesterfield, July 25, 1846.

J. W.—, a very muscular young man, aged 20, was engaged in removing some bags of wheat from a boat in the canal to a warehouse, eighteen feet above it, when just as one of the bags had arrived at a level with the warehouse the chain broke, and the bag fell upon the lower third of his right thigh, dislocating the thigh backwards into the ischiatic notch. At the time of the accident the man was bending forwards for the purpose of raising another bag.

I was sent for immediately, and with the assistance of my friends Messrs. Walker and Botham, proceeded to reduce the dislocation. We employed the pulleys in the usual manner, and kept up extension for upwards of three quarters of an hour, and repeated it at four different times; the patient was also bled to thirty ounces, and took seven grains of tartar emetic at intervals, without producing nausea or faintness. Having by these means failed in reducing the dislocation, we agreed to try direct extension. The patient was accordingly placed upon his back, with a wetted roller above his knee, to which the hook was attached, and direct extension made for nearly an hour; the pulleys were then let go suddenly, the knee rotated inwards, and the thigh raised from the pelvis, and to our great delight the head of the bone slipped into the acetabulum, but without any perceptible snap.

I gave my patient a dose of opium, and he never had a bad symptom from that time, and in less than three weeks was enabled to return home into Lincolnshire. The accident occurred at a quarter-before three o'clock, and the reduction was completed at nine o'clock.

COMPOUND FRACTURE OF THE SKULL : LOSS OF A PORTION OF THE BRAIN : RECOVERY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I am induced to forward for insertion in your Journal, the following case of compound fracture of the skull, with loss of a portion of the brain, it being a remarkable case of recovery from so serious an accident.

I remain, Sir,

Your obedient servant,

FREDERICK P. SMITH.

Aylsham, Norfolk, July 18, 1846.

October 1st, 1845, I was sent for to visit Thomas Keeler, a high-spirited unmanageable boy, of four years old, who, I was informed, had been seriously injured by a waggon about an hour before. On my arrival at his father's house, a distance of three miles from my residence, I was told he had been playing under a waggon in the field, and on its being driven forwards, he had fallen with his head between the spokes of the hind wheel; he was carried round by the wheel, and his head was forced between one of the spokes and an iron bolt which projected from the side of the waggon, a space measuring not more than three inches and a half.

On examining the head, I found a most frightful lacerated wound of the scalp, extending from the right temple across the forehead, and terminating in the left eyebrow; the frontal bone was laid completely bare, and the right superciliary ridge from its external to its internal angle, including a portion of the orbital plate, was torn up. On removing this, which laid loose in the wound, I found attached to it a portion of brain, of the size of the end of the little finger, and weighing about thirty grains; four other smaller portions of bone were also removed. After cleansing the