would seem to be expended on the nutritive organs, with a consequent deterioration of their functions. The innervation and circulation of the chylipoietic apparatus is disturbed and impeded; nutrition is weakened; assimilation is imperfect; and cacochymia follows; and with cacochymia a want of the natural harmony of proportion of the different pigimentary principles of the blood. It may be that the red principle—the hæmatine of the blood—is chemically converted into the melanic pigment; or it may be that the melanic principle is simply a carbonaceous product resulting from the waste of the organic tissues.

In melasma, we find an illustration of a principle not uncommon in pathology; namely, the persistence of the local abnormal action of the part after the general economy is restored to health. It would seem to be the natural habit of the blotches of melasma to remain for years or for life, when a constitutional debility or a morbid cause capable of keeping them up can no longer be traced. And, in one of the cases reported in this paper, after the restoration of the patient to a better state of health, after the establishment of a healthier hæmatosis, and after the removal of the stains by local means, the general tint of the complexion acquired a deeper, but, at the same time, a distinctly healthier tone than before. My patient exchanged a complexion of a faded, patchy, muddy hue, for that of a handsome brunette, the tint of brown being richer and brighter than before, and suggestive of the idea of a more copious oily secretion being blended with the pigimentary secretion.

In another case, one of melano-leucopathia, which I published several years back (portraits), I drew attention to the curious results to the economy of a variation of the standard of colour of the skin. In this case, there were four shades of colour present at the same time, the natural tint, the leucosma, the general melasma, and the partial melasma. Nature had, so to speak, physiologically adopted these four tints, and the question arose: Which would she decree to be the proper standard when a process of restoration of the pigment in the leucosmic patches was established? I solved this question experimentally by inducing a restoration of the pigment secretion on the white patches, through the agency of a stimulant application; the colour returned on these patches. I had set the melanic machinery in motion; but how was I to control it? It passed the original normal standard; it went on, and it passed the deep tint of general melasma; it still went on, until it reached and almost exceeded the deepest tint of all, the partial melasma. Here, then, was an example, not of a natural standard, but of an acquired or morbid standard.

[To be continued.]

COMPOUND COMMINUTED FRACTURE OF BOTH LEGS: DOUBLE AMPUTATION: RECOVERY.

By ANTHONY MARTIN, Esq., Evesham.

WILLIAM ROBBINS, aged 11, a spare, thin looking lad, came under my care on April 6th last, with the above accident. It appears that he was in the act of crossing the line of the West Midland Railway, to speak to his father, who was at the time engaged in loading a cart, when a luggage train, which was shunting goods, came on the line he was crossing, and knocked him down in the middle of the space between the rails, whence he tried to extricate himself; and, in so doing, got both his legs across the rail, and the wheels of six or seven trucks passed over them.

Upon examination, it was found that the right leg from the middle third to the ankle-joint was completely crushed, the large vessels and nerves ruptured, and the muscles in front and back of the leg totally destroyed;

the foot was wholly denuded of its integuments. The left limb was not injured so much as regards external appearance. The foot was completely crushed, but the integuments of the limb were whole, with the exception of an aperture high up close to the junction of the posterior tibial with the popliteal artery, from which considerable hæmorrhage was taking place, the artery being found to be ruptured. The soft parts of this limb were evidently much bruised as high as the middle third of the thigh. I adopted the circular incision in both instances, removing the right leg below the knee-joint in the upper third. There was considerable difficulty in tying the posterior tibial artery, from the unusual amount of retraction. The left limb I removed immediately above the knee-joint, on account of the division of the posterior tibial artery. No difficulty occurred in this operation; but the muscles were very dark, from the bruising before mentioned, presenting almost an ecchymosed appearance. The patient was put under the influence of chloroform.

Immediately on the completion of the operation, he was removed to the workhouse; the stumps were dressed with strapping and wet lint, a few points of suture being first introduced, and an opiate was administered.

April 7th, 10.30 A.M. He had passed a good night, and looked cheerful and composed. Pulse 110, and fluttering. He complained of no pain.

April 8th. The dressings were removed this morning. The general appearance of the stumps was good, though the soft parts of the left stump were much contused. Pulse 120, and very compressible. The opiate was repeated.

April 9th, 7.30 A.M. He slept well after the opiate; but the tongue was inclined to dryness. The bowels were freely relieved, and there was some discharge from the wounds.

April 11th. There was no apparent change, except that the left stump did not seem to be healing as well as the right.

April 13th. Some considerable bleeding took place in the night from the left stump, which looked gaping and sloughy. The last of the sutures was removed this morning. The pulse was much quicker, 135, and feebler. His appetite was good. Beef-tea and wine were given freely, and the opiates were continued.

April 19th. The left stump was still sloughy, discharging freely. Most of the ligatures on the arteries came away this day. The pulse was still very quick; it had not unfrequently been up to 150 since the last report.

April 22nd. There was slight improvement in the left stump. The sloughs had separated to a considerable extent. The pulse had diminished in frequency, though still very weak. The ligature from the femoral artery had come away this day. The wine and beef-tea were continued, with a mixture of cinchona and mineral acid.

April 30th. The general condition of the lad had greatly improved since the last note. The sloughs of the left stump had been very considerable, and the bone was protruding, but the right stump had gone on remarkably well.

May 15th. The right stump was healed; from the left, about an inch of the femur was removed.

The lad is now perfectly recovered; but, from the severity of the case, it seemed desirable to publish a report of it. The only untoward circumstance was the extensive sloughing in the left limb; this was occasioned by the nature of the injury, which could not be accurately diagnosed before the operation. But, had it been foreseen, I should rather have risked the irritation of the gangrenous inflammation than have amputated the limb high enough to remove all the injured portion of the muscles.