Rindfleisch, Bristowe, Duhring, and others. Again, in the *St. Bartholomew's Hospital Reports for 1872* (vol. 8), Dr. Dyce Duckworth contributed one of the most able papers that have been written within the last few years upon the nature and treatment of alopecia areata. Much evidence has been adduced on both sides as to its parasitic or non-parasitic origin; but, notwithstanding, the majority of those who have studied the microscopical characters of the altered hairs obtainable in this affection do certainly speak most emphatically, and I believe with truth, in favour of its being independent of any fungus-element. That this disease may occur associated with other parasitic affections—tinea tonsurans, for example—there can be no possible doubt; but the fact of a fungus being but seldom found with true alopecia proves that that alone cannot be the real cause. The bulk of evidence tends to show that it is an abnormal condition dependent upon nutritional changes in the scalp, producing a disturbing influence upon the hair's growth, loosening it in its follicle, allowing its closely arranged fibrillæ to become separated (thus accounting for the swelling in the shaft in the early stage), and rendering the hair so brittle that it either fractures with the slightest touch, or falls away with many others, leaving the characteristic patch. For my own part, I have examined microscopically many specimens of hairs, and have totally failed to find anything suggestive of a parasite. My attention has lately been drawn to two cases of alopecia successfully treated with local stimulants, and published in the *JOURNAL of November 14th, 1874*, by Mr. C. R. Roose. I wish, therefore, more particularly to speak concerning that form of treatment, and to give my experience in its use.

During the period when I was clinical assistant in the dermatological department of St. Bartholomew's Hospital, I had an opportunity of seeing very many instances of alopecia, and in my note-book I have notes of several cases precisely similar to those referred to by Mr. Roose. Without local stimulants, I believe it impossible to produce a cure. Good nourishing diet, and tonic medicines to improve the general health, as cod-liver oil, steel, mineral acids, and nuxvomica, are indispensable; but even these, without a stimulating topical application, are insufficient. At one time, it was my practice to compare the results of certain local remedies, and note the efficacy of each. Among those used were the blistering fluid of the *Pharmacopœia*, tincture of capsicum, spirit of turpentine, and the strong solution of ammonia, alone and combined. It is interesting to note how the scalp, when its nutrition is impaired, the vitality being lowered, will tolerate the use of such powerful applications for a long period, with less irritating effect than in health. The first remedy—the blistering fluid—was used in several cases with a fair result. However, when the disease is extensive, much inconvenience is experienced by the patient from a large vesicated surface; and, moreover, it was found that the result was not better than that of other applications. Tincture of capsicum in the form of a lotion, with glycerine and rose-water, proved useful, but yet inferior to either spirit of turpentine or solution of ammonia.

The relative merits of the two remaining fluids were then noticed. Cases were chosen in which several patches of the disease existed simultaneously upon the scalp of the same patient, that the influence of each remedy could be the more easily compared. A large number of cases were thus treated. The strong solution of ammonia was applied with a small piece of flannel, and carefully rubbed in night and morning until the surface became reddened. At first, the scalp appeared insensible to it, very little smarting occurring. This was repeated daily until the surface became sensitive, and the strength was reduced, or the application used less often. When the scalp became irritable, it was discontinued for a few days. In a few weeks, fine white downy hairs appeared, and gradually the hair normal in character returned. The scalp was ordered to be shaved periodically, to stimulate the hair's growth, and allow the more thorough application of the fluid. The spirit of turpentine was used in the same way.

A careful prognosis as regards time must always be given; for improvement is but slow in many instances, requiring even months before the patient can be convinced that good is being done. If patience and perseverance, however, be exercised, benefit is sure to follow, although it may seldom happen that some of the hair-follicles are so changed and atrophied that their function cannot be restored to normal.

Dr. Duckworth published in the *St. Bartholomew's Hospital Reports for 1873* (vol. ix), the conclusions that we were able to draw as the result of our observations, and I cannot do better than repeat them in his own words. They were as follows.

1. The local treatment by strong solution of ammonia is apparently more satisfactory than that by spirit of turpentine.
2. The renewal of the hair-forming function is probably hastened more by ammonia than by any other local application.

3. Turpentine appears to be only second in importance as a topical agent.

4. The ammonia treatment is, on the whole, less universally applicable in these cases than turpentine.

5. In certain cases—a decided minority—the ammonia treatment cannot be borne because of its severity, *e.g.*, exciting vesication. Turpentine never produces these effects, and is a less formidable agent in all respects.

6. Ammonia may, therefore, be regarded as a valuable local application in these cases.

I will only add that, since the publication of these conclusions, I am able to speak even more highly in favour of ammonia as a curative agent.

A RARE INJURY OF THE SHOULDER-JOINT.

By GUSTAVUS FOOTE, M.R.C.S., Kington, Herefordshire.

ON March 18th, 1871, a man named David Higgins came to my surgery, saying he had fallen down when he was very drunk three days previously, and had hurt his arm. On examination, the arm from the shoulder downwards was found enormously swollen, especially about the elbow, and for the most part hard and brawny; there was flattening of the shoulder. I told him the arm was out of joint, and proceeded to reduce it, which was easily effected, but it fell back immediately into the old place. On a more careful examination, I discovered the upper portion of the shaft of the humerus loose in the axilla, broken off at about the surgical neck; I had merely reduced the broken shaft, leaving the upper end in the axilla. The diagnosis then was, a dislocation into the axilla and a fracture of the bone at the surgical neck occurring at the same moment. Two days later, my friend Mr. Garrard saw him; and, after a long and careful examination, he agreed with me as to the nature of the accident. The treatment I adopted was merely to make sure that the ends of the bone should be kept in apposition, and to place the arm in a sling; the object being to cure the fractured humerus, and promote the formation of a false joint under the coracoid process of the scapula. The swelling gradually subsided, the bone readily united, and a fairly good joint was formed. The patient was able to continue his employment as a mason, having free use of his arm; he could not, however, raise it upwards so as to bring the hand above the head.

I did not see the man again until September 5th, 1874, three years and a half after the accident. He was then suffering from alcoholism; the symptoms being general paralysis and vital prostration. As he had no home, I had him conveyed to the infirmary at the union house, where he slowly sank, dying on the morning of the 10th. A *post mortem* examination was made twelve hours afterwards. The arm presented an appearance of dislocation downward into the axilla. An incision was carried from above the acromion process down the arm, to below the insertion of the deltoid, which appeared wasted, then across the upper part, and the bone was completely exposed by dissection. A singular condition of things was discovered. There had been fracture of the humerus at the anatomical neck and at the surgical neck of the bone; the head of the humerus was still in the glenoid cavity, and its attachments were firm. The lower end of the loose fragment had become united most accurately with the shaft, and the upper extremity had formed for itself a very good false joint, the cavity being formed by the under surface of the coracoid process, and the corresponding portions of the second and third ribs. At the point of union between the two ends of the bone on the outer side, callus had been thrown out, and a bony union had been formed with head of the bone still in the glenoid cavity. There were in fact two joints, the false and the true one. While *in situ* the arm could be moved freely in any direction, except upwards. The diagnosis proved to be nearly accurate, for practical purposes quite so. The only way in which I can account for this singular accident is by supposing, that when the man fell down the shoulder must have struck against a smooth projecting stone in the road.

The only case at all similar that I can find recorded is one mentioned by Sir Astley Cooper in his treatise of *Dislocations and Fractures*. A Mr. Blackburn fell from his horse and was declared to have dislocated his shoulder. It was not until after his death that the real nature of the accident was discovered; it was then found there had been a dislocation of the humerus, with a fracture at the anatomical neck; the detached head of the bone had become fixed by osseous union to the inner edge of the coracoid process, and the upper end of the shaft had formed a good useful joint.