were quagmires. The castle of Stirling was abandoned to its fate, and the army dispersed until the summer of 1300 A.D., when it reassembled at Berwick, and, under the king's command, made some ineffectual incursions of Galloway.

The "wardrobe accounts" show that De Belvaco, "cirurgus regis," with his "socii," was present with the army in the fall of 1299, and that De Kenle, "physicus regis," was then at Caversham, by the king's command, in attendance on his daughter, the Countess of Gloucester, in childbed. In September and October, 1301 A.D., the "valletti" of De Kenle were with the army in Scotland, and thus we know that the medical staff of the army in 1200-1300 A.D., comprised both physicians and surgeons.

In comparing the estimate set on medical services at various periods of history, it is of interest to note that the physician and surgeon of the army then received the same daily pay as the Admiral of the fleet—the first of that rank in English history—and their subordinates the same as the captains of the ships composing the fleet. This is an outline of the *personnel* of the earliest recorded medical staff of the English army with its rank and emoluments. It was established by Edward I, worthily styled the greatest and most glorious of the Plantagenets, who may have been conscious of having owed his life to the skill of an English surgeon when in the Holy Land.

[To be continued.]

THE ETIOLOGY OF PSORIASIS.

By BALMANNO SQUIRE, M.B.

I THINK it not altogether improbable that the expression met with in the Bible, "a leper as white as snow," may refer to this disease. Certainly nothing that I have yet met with in the shape of the "leprosy of the East" (elephantiasis Græcorum) merits the application of such a phrase, whereas psoriasis is the only disease I have seen that fairly corresponds to such a description.

I have long noticed psoriasis to be specially common amongst the Jews of this and other countries. At the east branch of the British Hospital for Diseases of the Skin, where I have had a good many of the poorer class of Jews under treatment, I have found the disease proportionately so much commoner with them than with other persons, as to attribute the frequency of it amongst them to the influence of race. It is well known that psoriasis is at least very often an unquestionably hereditary disease. I may add that amongst such of the higher class of Jews as I have known, either as acquaintances or patients, I have found the same special frequency of psoriasis; I am therefore persuaded that psoriasis must have been a common phase of what was termed leprosy amongst them when all serious skin-diseases were confounded under that title. It might be objected to this that psoriasis is not contagious; but such investigation as I have been able to make in the nature of the "leprosy of the East" has almost assured me that it also is not contagious, although it is commonly supposed, even in countries where it is prevalent, to be highly contagious.

The conclusion which I have formed as to this latter disease is, that its prevalence in certain countries is a question of climate, and not a question either of race or of contagion. The contagiousness of leprosy (vaguely so called) is probably limited to that proportion of cases which are simply cases of syphilis. The hereditary cases of leprosy are probably cases of psoriasis. Psoriasis, unlike elephantiasis Græcorum, is not an affair of climate; but, equally unlike it, it is an affair of ancestry. I cannot profess to say in what proportion the disease is distributed amongst the various tribes of mankind; but I do not go merely on such data as I have already advanced, in asserting it to be especially common amongst those who are of Jewish descent.

In estimating the influence of race in the causation of any given skin-disease, one has to encounter under ordinary circumstances very serious difficulties. In the first place, skin-diseases are apt to shade off one into the other; and the diagnosis of individual cases as definite entities is commonly enough a question of opinion even amongst those who have fairly earned the reputation of being experts. In the second place, different races of mankind are often so indistinguishably blended in one individual that the diagnosis of the race is at least as difficult as that of the disease. But psoriasis is, of all skin-diseases, the most definite and distinguishable, even when complicated with other eruptions; and the Jewish features (for the reason that the Jews are the only Asiatic nation that has extensively located itself amongst us) are the most readily identified even when the race has been for several generations a mixed one. Accordingly, I have followed out the subject amongst the general community, and I have arrived at the conclusion that psoriasis is commoner amongst those of partially Jewish de-

scendant than it is with those who present no evidence of Asiatic origin. It will be understood that I am as far from asserting that every one who has psoriasis is of Asiatic descent, as I should be from saying that all persons who are of Asiatic descent have psoriasis.

It has been observed by Professor Hebra, in speaking of 3,000 patients treated by him for psoriasis, "Now these have, without exception, been persons of strong constitution and firm fibre, who were well nourished, and whose bodily functions were in perfect order: in a word, they have been blooming healthy individuals." I may add to this, that my own observations perfectly accord with this statement. The fact may possibly afford some explanation of what I have asserted, since the good average *physique* of the Jew is scarcely less remarkable than the unquestionably high average of his intellectual gifts.

THE URINE IN HÆMOPHILIA.

By J. WICKHAM LEGG, M.D., Casualty Physician to St. Bartholomew's Hospital.

FERDINAND UHLE, born December 26th, 1861, was admitted into St. Bartholomew's Hospital, under the care of Dr. Southey, on December 2nd, 1872. He was the subject of hæmophilia. When he was seventeen months old, spontaneous ecchymoses were noticed under the skin of the back and limbs. Epistaxis began at two years of age. Just before he was two years he fell and cut his forehead: he was treated by a doctor in Hanover, but the bleeding was not stopped till the child was almost dead. As a child, his nose bled every two or three months. About four years ago he had blood in his urine. He is said to bleed now occasionally when changing his milk-teeth.

His joints began to be swollen when about two years old. The knees, elbows, ankles, and small joints of the fingers, are swollen occasionally; the right knee is always bigger than the left. Four years ago, he was admitted into a hospital in London for his swollen knee; and, although the mother informed the surgeon in attendance of the patient's liability to bleed, leeches were applied to the joint: the bleeding from them, however, only lasted a day and a night. The patient has a brother, also the subject of hæmophilia; but there is no history of the disease amongst the other kinsfolk of the boy.

On December 3rd, he had blonde hair, gray eyes; he was anæmic. The left knee was much swollen; the patella floated upon the fluctuating swelling of the joint, but the ends of the bones forming the joint could be made out. The temperature and the heart-sounds were natural, as was also the liver-dulness. The spleen was not enlarged to palpation, though by some it was thought enlarged to percussion. The boy's appetite was good; he complained only of pain in the knee, aggravated at night. The knee was painted with tincture of iodine.

As the temperature was natural and the appetite good, it appeared to me a good case for investigating the amount of urea daily excreted; and I wish to express my thanks to Dr. Southey for his kindness in allowing me to make these observations. The boy was kept in bed during the ten days over which the observations extended. He had one motion daily. The urine was collected from 8 A.M. to 8 A.M.

On admission, the diet allowed was the milk-diet of the hospital—that is, twelve ounces of bread, two pints of tea, a pint of milk, and three-fourths of an ounce of butter, daily. To this was added, on December 5th, a mutton-chop daily; and on December 8th and 9th, four ounces of wine; but on December 10th the wine was exchanged for an extra pint of milk daily. The reaction of the urine throughout the period of observation was faintly acid; albumen was in no instance present, as tested by heat and nitric acid. No change of colour followed the addition of thirty or forty drops of fuming hydrochloric acid to a few grammes of the urine.

	Quantity of urine in cubic centimetres.	Urea. Grammes.
December 4—5	1170	20.6
„ 5—6	1130	18.08
„ 6—7	950	17.575
„ 7—8	1330	13.275
„ 8—9	Lost.	00
„ 9—10	1030	22.145
„ 10—11	920	16.56
„ 11—12	1100	19.8
„ 12—13	1700	16.35
„ 13—14	1230	17.835

The urea was estimated by Liebig's volumetric process with nitrate of mercury, allowance being always made for the presence of chlorides.

On December 18th, the boy's weight was very nearly twenty kilograms. A day or two after the last observation on the urine, a spon-