outdoor air and action; and, having the courage of her convictions, she took the nearest thing that offered, which was an agency for hospital supplies in the large cities. A friend meeting her two months later in a distant city was pleased to note that she had recovered her poise and the fresh coloring for which she had been known as a girl and had regained a normal interest in the day's work and in the life around her. Change of occupation is not always practicable; however, those who are imprisoned daily at their work and cannot escape it may yet do much for themselves by choosing outdoor rather than indoor recreation. During the noon hour they can go to the waterfront or into a florist's shop, if they need moisture. If they need the opposite change, they will find a dryer zone usually upon a hill or at the top of a tall building.

The growing custom of outdoor sleeping has the advantage of subjecting the sleeper to less rapid changes of humidity. The outside air tends to keep more nearly normal; being cooler at night than indoor air, its relative humidity is likely to be higher. Even the walls of a tent may keep out dampness and decrease the humidity. One summer while sleeping in a tent, desiring to get a little more ventilation, I moved the head of the couch outside so that there was no protection over the face, and immediately noticed how much softer the air seemed. The tent canvas had absorbed the dew and shut out most of the moisture.

Living out-of-doors day and night must, of course, benefit persons suffering from tuberculosis, because the changes of air are more even. Their sensitive throats and lungs are not at any time subjected to so much irritating dryness.

CONCLUSIONS.

The problem of constructing buildings in such a way as to keep the interior up to a fair degree of humidity is a large one. So far engineers have made little practical progress toward its solution. Their ingenuity has been taxed to improve the moisture in large public buildings. The devices for this have so far proved too expensive for private dwellings, hotels, offices or schoolhouses. Another difficulty has been to arouse public opinion on the subject, or to convince of its importance. Americans complain of the drafty, poorly heated buildings abroad, but American houses are both too nearly air-tight and too much heated for ideal humidity. Too little of the moist fresh air enters; and this, under the rising temperature, has its relative humidity greatly lowered. The situation calls for some special measures.

It is well simply to call attention to the fact that clothing and covering of the body interferes more or less with an equal shading of humidity and evaporation and circulation of the air directly over the skin. Advantage may be taken of this fact. If the skin is allowed to enjoy longer periods of freedom from clothing upon retiring or rising, or when they are being changed, the body will be bathed more equally by air of a like degree of humidity and should benefit from such

baths. Clothing which permits freer circulation of air is a step in this direction, but this whole subject can be reserved to a later discussion.

If one must live much indoors he may improve the temper of his rooms by various devices, such as keeping growing plants and setting about porous dishes, as flower pots, full of water. If such receptacles are set near electric fans the stirring of the air facilitates evaporation. Some housekeepers have even placed such pots within the radiator.

There are some objections to the use of plants, such as the amount of care they require, the space they occupy and the physiological effects of their odors and gaseous exhalations. Those who love plants, however, may get encouragement from the fact that the beauty and fragrance are joined with a humbler and inconspicuous but very much needed service. Porous vessels, too, demand some care. If they are not covered dust will gather within them, evaporation will be retarded and the water itself will grow foul. The vessels should be covered or closed and the water changed occasionally to keep all fresh. As with plants, the esthetic sense may be satisfied along with the useful. Pottery may be formed to furnish an elaborate amount of evaporating surface and at the same time artistically designed.

After all, there is nothing for humidity like the out-of-doors. Even though the humidity may range from that of parched Arizona to that of the English Channel, it is so admirably adjusted to the environment on nature's gigantic scale, and so likely under the vast majority of conditions to be superior to anything that can be produced artificially, and it is so bound up with advantages of other sorts, that the Great Open must be the common refuge, and to the natural we must turn in our search after the ideal. Conditions indoors may and must be improved; conditions outdoors wait to be enjoyed.

Clinical Department.

A CASE OF PELLAGRA.

BY C. H. DEAN, M.D., NORTHAMPTON, MASS.

THE following case was under observation for several weeks before any diagnosis could be made. It was then recognized as very similar to the described cases of pellagra. No one who saw the case had ever seen a case of pellagra, but we became convinced that that was the condition with which we had to deal.

H. T., male, single, age thirty, laborer, was admitted to the Northampton State Hospital on April 3, 1911. He had been intemperate and was committed as a case of alcoholic insanity. For a year he had been indifferent and disinclined to work. For three days he had been delirious and violent. There had been hallucinations of hearing. It was later learned, from the patient and his brother, that during the summer of 1910 he had suffered from gastritis and had frequently vomited. There had been a similar gastritis, though less severe, during the summer of 1909. They did not remember that there had been any skin affection.

Physical examination showed a well-developed, able-bodied man. There was a marked acne on face and chest. There was no abnormal condition of circulation or respiration. Urinalysis was negative except for the presence of indican. The patellar reflex was diminished. The right pupil was larger than the left; both reacted to light.

He was dull and confused, answered slowly and was unable to give definite information. On the day of admission there was gastric disturbance, and the stomach was washed out. The stomach contained considerable fluid, including apparently some alcoholics. He rapidly improved, ate heartily without gastric disturbance and became brighter and free from hallucinations.

On April 11 the hallucinations had returned. He became melancholy and was soon very much confused. On April 28 he vomited and showed considerable gastric disturbance. The gastritis continued for some time. During this period he was severely constipated. By May 10, he was quite ill and was suffering from a severe stomatitis. He continued to be fretful, confused and melancholy. By the last of May there was a very offensive odor from his person. The skin of the scrotum was red, somewhat thickened and moist. This condition was later recognized as very similar to that of the hands. The acne of the face had improved. Early in June he showed some trouble with the skin of the hands. The backs of the hands were dark red and there was considerable desquamation. He had been eating fairly well, but was failing physically.

During July his condition became much worse. His weight had dropped from 157 to 133. He had developed a severe diarrhea which did not yield to treatment. The stomatitis continued; the tongue was large, red and fissured. He frequently vomited. There was no blood in the vomitus and no pain or other evidence of ulcer.

The erythema of the hands was very marked and symmetrical. There were fissures, especially over the knuckles, but no ulcers. The palms were not affected. The redness extended from the first joint of the fingers to just above the wrist joint and around the wrist. The upper line of demarcation was well-defined. Later the erythema largely disappeared, leaving a dark line along the border. On the fronts of the wrists the skin was thick and hard and deeply fissured.

During the last of July he became unappreciative, obstinate and finally delirious and so restless that it was difficult to properly care for him. Consciousness was entirely lost. During the last two days there was almost constant spasmodic contractions of the muscles of the upper extremities and neck. At times there was distinct opisthotonos. He died on Aug. 3, 1911.

Medical Progress.

RECENT PROGRESS IN NEUROLOGY.

BY PHILIP COOMBS KNAPP, A.M., M.D., BOSTON.

SCIATICA.

OSSIPOW¹ reports ten cases of sciatica treated by injections of normal salt solution, with six recoveries and four materially benefited. He injects 15 ccm. of the salt solution at a temperature of 0° C., using a glass syringe and a needle 8 cm. long. The first injection is made at a point

midway between the tuberosity of the ischium and the great trochanter, if possible into the nerve. This is extremely painful, but the pain lasts only a few minutes. Subsequent injections are made lower down along the course of the sciatic, taking care not to go below the upper half of the thigh, to avoid wounding the femoral artery. The injections are made three times a week, and the amount injected was at times cautiously increased up to 100 ccm. Favorable results were obtained in sciaticas due to cold, alcohol and injury, and in cases where other methods of treatment had failed. Fifty to sixty cubic centimeters was usually a sufficient dose. The pain often becomes worse a few hours after the injection, but this is usually relieved by warm compresses or massage. The injection may also be made in painful points in the gluteal region. In chronic cases repeated injections must be made in amounts of 10 to 20 ccm. or more. Injections are not contra-indicated in acute cases, but other methods should be tried first. One or two injections are insufficient in chronic cases. The results are usually permanent, but relapses sometimes occur. Some hours after the injection there is usually a chill and some elevation of temperature, up to 103° F., lasting a few hours, due to the influence of the salt through the blood on the central nervous system. The addition of calcium chloride apparently causes less febrile reaction. The treatment is contra-indicated if the rise of temperature is slight, as in tuberculosis, pronounced arteriosclerosis, etc.

THE ULTIMATE PROGNOSIS IN SPINAL AND CEREBRAL INFANTILE PARALYSIS.

Stern² has made some interesting investigations of the present condition of children who have suffered from poliomyelitis or cerebral hemiplegia. Oppenheim and Gowers have both claimed that children with poliomyelitis had a predisposition to spinal muscular atrophy in later life. Stern has found only about sixty reported cases, and not all of these will bear critical analysis; some, at least, are cases of recurrent neuritis. He himself has investigated the condition of 107 patients who had suffered from poliomyelitis at periods of from five to forty years before. The great majority of cases were affected before the age of five, but he believes that, after the acute stage is past, the prognosis is no better below the age of five than it is after. In the acute stage the prognosis is rendered worse if there be cerebral complications, which may lead to epilepsy, or if there be neuritic symptoms, which may cause a recurrence of trouble. A slow onset of paresis, with periods of exacerbation, is of bad prognosis. The distribution of the paralysis seems to be of prognostic significance. The cases with favorable results as a rule showed a residual paralysis in a single limb. In only one case was there complete paralysis of both legs, and no case showed paralysis of both arms or of one arm and both legs, although such a distribution is not uncommon in fresh cases. It

¹ Monatschrift für Psychiatrie, xxx, 54. July, 1911.

² Jahrbücher für Psychiatrie, xxxii, 139. 1911.