

DROWNING ACCIDENTS

(Continued)

air passages from water and mucus. Second—Forcing the vitiated air from the lungs.

Third—Replacing the foul gases with pure air.

Fourth—Inducing circulation. Fifth—Restoring natural respiration. This of course is the final and essential aim.

1. Lay patient down carefully prone with face downward. Open mouth wide, and if foul with mucus or foreign matter, clean with hand or cloth. Stand across body, facing the head, pass your arms around the waist until your hands meet over the left side, interlocking the fingers in order to grasp the stomach between your palms. Force out the water by raising the body from the middle, at the same time pressing the hands together. Knead inward and upward under the ribs from the left side towards the centre. Press for four seconds, then relax, endeavouring to grasp more of the stomach pouch, until water ceases flowing from the mouth.

ARTIFICIAL RESPIRATION



Cut 103—First Operation—Inspiration



Cut 104—Second Operation—Expiration

2. Place a pillow-like support beneath the victim at the stomach. Turn his head to windward and crook his arm on the side opposite the face and rest the head in the bend of his arm.

3. Kneel over the patient facing the head with one leg on each side of the body. Rest your open hands on his back, thumbs near the spine, at the height of victim's elbow, with fingers spread over the lower ribs. Throw yourself forward with weight on your arm, and with steady, increasing pressure force the foul air from the lungs. After four seconds straighten up quickly, releasing the ribs, so that they will spring back into place. Bend over again immediately to press for four seconds more, then straighten. Continue this treatment until signs of life begin to appear. Make from twelve to fifteen respiratory acts to the minute. Do not become discouraged if your efforts at resuscitation do not at first meet with success, as often a patient will respond after all hope seems lost.

Authentic cases are on record of victims having been restored to life after being under water for as much as half an hour, and it has at times taken as long as four hours to induce natural respiration in the apparently drowned.

4. As soon as natural breathing

sets in strip the patient of all wet clothing, cover the upper body with something warm and dry and start rubbing the limbs with rapid strokes, first from the centre joints towards the heart and gradually working down in this manner to the extremities.

5. After massaging the patient put him to bed and if natural heat does not return promptly, distribute covered hot bricks or water bottles at the soles of the feet, over the stomach and under the armpits.

6. If necessary, give patient whiskey, brandy or other stimulants, diluted in hot water. Administer in teaspoon or tablespoon doses, every ten or fifteen minutes for the first hour, and as often as seems expedient thereafter.

TREATMENT OF ELECTRIC SHOCK

Electric shocks suspend the action of the heart and breathing should be restored by artificial means.

Although the shock may appear to have been fatal, life may often be restored if action is taken without delay, and continued vigorously and patiently.

The steps to take are:—

Remove the body from contact with the wire, cable, or other conductor by breaking or disconnecting the circuit; dragging the patient away by his coat-tails, the hands being protected by rubber gloves or any dry woollen material, such as a cap, folded several times or with a stick or any non-conducting material.

If possible, without discontinuing the treatment, send for a doctor.

After removal do not wait to undo the clothing but proceed to restore breathing by the same method as described above for drowning accidents.—W.J.D.

CONSERVATION IN CHINA

United States Commercial Bulletin:—"Mr. Chang Chien, lately Minister of Agriculture and Commerce, visited Nanking recently, accompanied by Mr. Han, chief of the Bureau of Forestry in that ministry. He had inspected several sites for establishing forest reserves and had decided on two—one on Tai Shan in Shantung, famous as the burial place of Confucius, and the other near Feng Hsiang in northern Anhui. While in Nanking, Mr. Chang opened a school of hydraulic engineering, designed to fit students in the Huai River Conservancy Works. He also visited the plantations of trees on Purple Mountain, maintained by the Nanking Colonization Association under the immediate direction of Prof. Bailey, of the Nanking University. Mr. Chang was one of the founders of the Colonization Association, and is much interested in its work. His interest has resulted in practical aid from the central Government in the form of an annual grant."

Forests on Waste Land

Experience of France Shows That Might be Accomplished in Trent Watershed

In the nineteenth century, up to 1865, according to Dr. B. E. Fernow, the State Forest Department of France planted 200,000 acres of sand dunes and placed them under management at a total expense of \$2,700,000, or \$13.50 per acre. A little less than half of the area was then ceded to municipalities and private owners for \$2,745,000, thereby paying fully for the outlay. The remaining 125,000 acres are valued at \$10,000,000. In 1901, the first cutting was made and yielded \$92 per acre from a property that had cost nothing.

Dr. Fernow reports also that the improvement by ditching and planting of the adjoining Landes, nearly 2 million acres, was begun in 1837 by private individuals. By 1857, they had reclaimed 50,000 acres. Then the government stepped in with a broadgauge plan, building roads, railroads, drainage systems, assisting the municipalities in reclaiming the land and making planting plans free of charge. The State itself bought some 390,000 acres of the land to enable the municipalities to accomplish the improvements. This once poverty-stricken district, which, a century ago, was hardly inhabited, is now traversed by the densest net of railroads in France. By 1907, with an expenditure of around \$10,500,000 (\$6.50 per acre) 1,600,000 acres had been reclaimed, 85 per cent in forest, of which the State owns somewhat over 100,000, municipalities 185,000, and private owners the bulk of 1,500,000 acres. In 1893, the value of these holdings, created from nothing, was estimated at over \$96,000,000. The average net yield was \$2.40 per acre in 1892, and since then has been rising so that now an annual income of \$8,000,000 is the result. This from an expenditure of \$10,000,000.

In view of these financial results from forest planting on waste lands in France, there can be no doubt that systematic planting on a large scale on non-agricultural lands in Canada, especially in the white pine region, would be a thoroughly good business policy. The results already secured by the Ontario and Quebec governments in similar work on a small scale show conclusively that planting operations under these conditions are wholly practicable. A report by J. H. White and C. D. Howe, published in 1913 by the Commission of Conservation, urges that this procedure be followed by the Ontario government on waste lands in the Trent watershed, and shows that it would be not only highly desirable from an economic standpoint but a paying investment as well. The large expenditures by the

Dominion government on the construction of the Trent canal would undoubtedly justify financial cooperation by the Dominion, or even the undertaking of this work at first hand, in order to secure watershed protection, thus decreasing erosion and tending to regulate streamflow.—C.L.

Settlers Start

Forest Fires

Effective Close Season Necessary to Protect Forests During Dangerous Period

During the last few days in May and the first week or ten days in June, the weather conditions in both Ontario and Quebec were very dry, resulting in the spread of many fires, some of which assumed large proportions and did considerable damage. Information secured by both the Conservation Commission and the Railway Commission indicates that, while the damage done by railway fires was small, much property has been destroyed through the spread of fires started by settlers for the clearing of land. In Ontario, there is practically no restriction upon settlers' brush-burning operations, and the result has been that, during every dry season, fires started by settlers for this purpose have spread beyond control, causing great loss of property, and, in some cases, loss of life. In Quebec, the law endeavours to regulate the setting out of fires, by establishing a closed season, during which no such fires shall be set, unless a permit is issued by an officer of the Forest Protection Branch. However, great difficulty has been met in securing satisfactory observance of this law, and nearly every year great damage is caused on this account. The modern tendency in forest fire protection is very distinctly toward the establishment of a closed season, during which no fires for clearing operations are allowed to be set out, unless upon permit by an authorized officer. Coupled with this must be an adequate and competent staff to make the law effective. The past difficulties in eastern Canada have been largely due to either the lack of such a law, or of its adequate enforcement.

As a rule, the railways are now doing thoroughly commendable work in fire protection, and in many cases have expended considerable sums in controlling fires unquestionably due to outside sources. The next big step in forest fire protection throughout eastern Canada should be in the direction of securing better control of settlers' slash-burning operations during dangerous seasons.—C.L.

Safety first at the summer resort is as important as at home. The number of deaths by drowning each summer is a large one.