

Do not let your hands on the forearms slip away from the elbows; the best result comes from grasping close to the elbows, as shown in Fig. 9.

The operator must appreciate the fact that this manipulation must be executed with methodical deliberation, just as described, and never hurriedly or half-heartedly. To grasp the arms and move them rapidly up and down like a pump handle is both absurd and absolutely useless.

Each time the arms are pulled above the head and the chest expanded, the assistant who is holding the tongue should pull the tongue out and downward, and another assistant should, from time to time, slap the chest with a towel or cloth wet with cold water, as shown in Fig. 10.

When the patient is breathing by himself, the process of artificial breathing can be stopped, but the process of pressing the sides every other time he breathes out, should be started as follows:

Do not press vertically, but press on the patient's side (palms of hands over lower ribs) in such a manner as to force as much air out of the lungs as possible, Fig. 5. You can carry out this pressing action most successfully, if, on beginning, you move your hands in and out with every breath, pressing very lightly, until you have established a rhythmical motion of your hands in unison with the patient's breathing; then you can begin to press hard at every other outgoing breath.

(The object of doing this is to strengthen his breathing. By making the pressure every other time he breathes out, you give him an opportunity to take a breath himself, and this natural effort to breathe is in itself strengthening to the action of the lungs.)

Continue this pressing action until the man is conscious and breathing well by his self.

The rubbing of the legs and arms should continue as long as the artificial breathing, or pressing action, is necessary, and the holding of the tongue, and the passing of the bottle of ammonia with sponge attachment under the nose, as long as he is unconscious, as shown in Fig. 5.

After he becomes conscious, give him a half teaspoonful of aromatic spirits of ammonia in a third of a glass of water. After you have brought him around, surround him with bottles of hot water.

(Beer bottles are easily obtained, and should be filled with hot water and covered with a paper or cloth to prevent burning the flesh. Hot bricks, also covered, or gas bags filled with hot water will answer as well.)

Then cover him with a coat and watch him. See Fig. 11.

In performing artificial breathing, if the patient does not show any signs of coming to life promptly, you should not be discouraged, but should continue the motions regularly for at least an hour, summoning such assistance as you may need. Cases are known where patients showing no signs of life after an hour's work have still recovered, and their recovery was due entirely to the faithful persistence of the person in charge.

Persons shocked by electricity need fresh air; therefore, bystanders should not be permitted to crowd around a patient, and no one should be allowed to approach him except those carrying out these instructions.

The recovery of a person unconscious from electric shock may be hastened by the use of oxygen, which should be administered at the discretion of the doctor.

#### Burns Caused by Electricity.

Electric shocks are often accompanied by various types of burns, which should be treated as follows:

Have the injured attended by a doctor as soon as possible. In the meantime cover the burned surface with cotton, saturated in a strong solution of bicarbonate of soda and water (as much soda as the water will absorb), and then wrap with light bandaging. In the absence of soda, carron oil may be used in the same manner.

(Even apparently slight burns should be treated by a doctor, as the injuries are likely to prove more serious than those resulting from ordinary burns.)

Should the articles contained in the company's emergency kit for electric shock cases not be on hand when needed, after

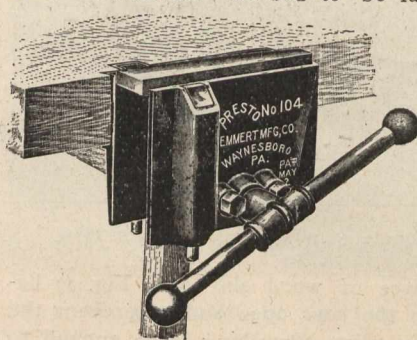
sending for a doctor, every effort should be made to revive the patient, by following the course of movements described until the doctor arrives and the necessary articles are secured.

[In our February issue, we purpose illustrating and describing "First Aid" practice at the Canada Foundry Company's Davenport Works.—Editor.]



#### QUICK-ACTING VISES.

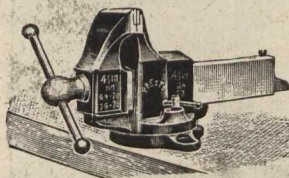
The accompanying illustration shows two of the latest patent vises. The first is a quick-setting cabinet-makers' vise. These are devised to be fastened underneath the bench, and are adapted for the holding of every



description of wood-work. Attention is called to the following special features: (1) The planed jaw surfaces, which make it a closer fitting vise than any other; (2) its length of beam, which permits it to open 14";

(3) its power to grip at any point between 0 and 14 inches; (4) its possibility for continued screw pressure of one-half inch after gripping the work; (5) its adjustable holding pins; the efficiency of which may be increased by an additional pin in the bench plank; (6) its self-adjusting loose jaw, suitable especially for tapered work.

The second illustration shows a quick-acting, self-adjusting jaw, coachmakers' vise. The rear jaw of this vise is



self-adjusting, and in use automatically conforms to any angle, adjusts itself and holds firmly the object whether it be straight, beveled, or wedge-shaped; thus making it a parallel solid jaw vise. The self-adjust-

ing jaw resting and working as it does upon, and against the solid body of the vise, is thereby rendered as strong and durable as a solid jaw.

These tools are manufactured by the Emmert Manufacturing Company, Waynesboro, Pa., U. S. A.



#### KEEP A-GRIINNIN'.

If troubles come an' sorrows, too,  
As life's silk thread you're spinnin',  
Just throw 'em off an' don't get blue,  
An' keep right on a-grinnin'.

There aint no use a-bein' glum,  
Cuz other folks are winnin';  
Git up an' push, an' you'll win, too,  
So keep right on a-grinnin'.

The Lord aint bin no worse to you,  
Than others who've been sinnin';  
You've got stack-loads to thank him fer,  
So keep right on a-grinnin'.

Don't let the troubles of last year  
Spoil this from its beginnin';  
A little leaven spoils the lump,  
So keep right on a-grinnin'.

Make every season of this year  
Pure white with Char'ty's linen,  
And every one will love you more  
Fer keepin' on a-grinnin'.

— F. B. UTLEY, of Galt.