

These deep respirations should be repeated five or six times; and the exercise gone through with several times a day. It is hardly necessary to remark that the clothing must in no way interfere with the exercise.

In some cases this exercise is more advantageous when taken lying flat on the back, instead of standing. In this position the inspiratory muscles become rapidly strengthened by opposing the additional pressure exerted by the abdominal organs against the expanding lungs. And on the other hand, expiration is more perfect and full on account of the pressure of these organs. This is an exercise now advocated by several leading vocal teachers of Europe.

In conclusion, I will mention the exercises proposed by Dr. Dally (Bul. Gun. de Thérap., Sept. 20, 1881), for enlarging lung capacity:

"1. The first or normal is the vertical position perfectly erect, as if standing against a wall, the arms hanging by the side. This position should be taken and kept ten minutes at a time, a number of times a day.

"2. The two arms and the hands are extended horizontally forward, the palms facing. The hands are separated slowly, whilst the chest is inclined forward. Remain in this position thirty seconds, and inspire deeply by the nose. Return to the initial position and expire. Execute this movement six times.

"3. The arms hang by the side; raise them upward—the fingers well extended—above the head, the palms looking forward. Take a deep inspiration. Let fall the arms alongside the body, palms open and expire slowly.

"4. Double rotation at the side. The subject being in the normal position (first,) executes as large as possible, the arm well extended, double rotation laterally, and inclining the trunk forward each time that the arms are thrown behind, and never projecting the abdomen forward. This movement is executed entirely by the scalpo-humeral articulation.

"5. The arms are crossed horizontally, the palms looking backward. Flexion lateral, alternately, of the trunk. The flexion will then be regular, transverse, the abdomen drawn in, the legs extended apart, the pelvis fixed. The limit of the flexion is the vertical position of the elevated arm. Mild inspiration during the flexion, at its termination expiration. Execute these movements six or eight times.

"These exercises, if faithfully carried out improve the shape and capacity of the thorax and check the development of incipient phthisis.

"According to Dr. Dally, dyspnoea, polysarcar, and arthritic conditions are removed or sensibly ameliorated. Venous states, varicose dilatations, and infarctions are, after some weeks of such movements, much improved, when the circumstances are favorable. The great obstacles to this hygienic medication in our civilization are the

habitual laziness and idleness, and the indisposition to devote time and interest to such means." *Southern California Practitioner.*

### PLACENTA PREVIA.

Dr. Robert Barnes says that the conflicting ideas regarding the treatment of this dangerous condition justify him in pointing out the true theory which should govern our procedure. The methods advocated are as follows: *Accouchement forcé*, to which Spiegelberg lends his authority. "Rupture the membranes, draw down a foot and wait during extraction."—Schroeder. Bi manual version, tamponing. It has been urged that rapid and forcible delivery, while dangerous to the child, is justifiable, as the condition is so perilous that the child need not be considered. Barnes believes that it is no longer permitted, without clear necessity, to sacrifice the child, and he has found that the methods which are most successful in saving the mother are those which give the child the best chance. He bases his theory of placenta previa on a division of the uterus into three regions: The fundal, which is the typical normal attachment of the placenta; the equatorial, which is the seat of lateral attachment, and predisposes to accidental hemorrhage; the lower uterine segment. This, which was first described by the author in 1847, is divided from the equatorial zone by what is variously known as Braun's os internum, Bandl's ring, and Schroeder's contractions-ring, at a point which generally corresponds to the equator of the fetal head and frequently to the pelvic brim. When the placenta invades this lower segment, danger begins, as the part so situated is liable to premature detachment. He believes that the anatomical differences between the middle and inferior zones, which have been described by some authors, are exaggerated. The source of the hemorrhage is the uterine vessels which are torn across by the detachment of the placenta from its walls. The cause of this rupture cannot always be muscular contraction, as it sometimes takes place before any contraction has occurred. From its frequent coincidence with a menstrual period, vascular tension must be considered as a factor. The spongy cellular structure of the placenta favors accumulation of blood; from this distension there may be rupture of vessels and hemorrhage within the structure of the organ. The bulk of the distended placenta becomes greater than its area of attachment, and separation takes place, and hemorrhage persists if contraction does not set in. This condition must also be considered a factor. The form of contraction which prevails in the inferior uterine segment is retraction, longitudinal muscular fibres continued from the middle zone, pull up or retract the lower zone, thus dilating the cervix and facilitating expulsion. When the reaction is retarded there is hemorrhage. An obstacle to this retraction is