

are taken to give all the recruits from three to twelve months' gymnastic training to develop them as *men*, before they are expected to conform to the requirements of the soldier.

### MILITARY DRILL AND GYMNASTIC TRAINING IN PHYSICAL CULTURE.<sup>1</sup>

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I FEEL some embarrassment in standing here as an advocate of the superiority of gymnastics over military drill as a means of physical training for school-boys, since, in so doing, I am obliged to dissent from the views of General Moore, who was formerly my commanding officer. I suppose that as one of his orderly-sergeants in the Latin School Battalion, I passed the climax of my self-importance. I thought then that the drill was a very good thing. I think now that it did the other boys good, and that it did me good, but I am compelled to think, as the result of my reading, observation and experience, that while much good may be accomplished through military drill in boys' schools, very much more good can be attained through a well-devised and intelligently-managed system of gymnastics.

It is a noteworthy fact that physical training has always owed much to lessons learned in war. Under the sting of defeat, or the stimulus of victory, the most enlightened and the rudest nations have alike been impelled to give to bodily training a place in their schemes for the education of their youth. It was in the half century following the victories gained by the Greeks over the Persians, that Greek gymnastics saw their palmy days. It was then that the gymnasium furnished the finest models for the noblest specimens of the sculptor's art. Although the Greek training was chiefly general and educational in its aims, it embraced certain exercises of a martial character. The Norman archers made such an impression upon the English at Hastings, that centuries elapsed before English law-givers ceased to legislate for the training of the people in "Shooting."

An English law passed in 1388 required servants and laborers "to have Bows and Arrows and use the same the Sundays and Holydays, and leave all playing at Tennis or Football and other Games called Coits, Dice, Casting of the Stone, Kailes, and other such importune Games." Henry VIII caused Parliament to enact, in 1511, that "every man being the King's subject, not lame, decrepit or maimed; being within the age of sixty years, except spiritual men, justices of the one bench and of the other, justices of the assize, and barons of the exchequer, do use and exercise shooting in long bows, and also do have a bow and arrows ready continually in his house, to use himself in shooting; and that every man having a man child or men children in his house shall provide for all such, being of the age of seven years and above, a bow and two shafts, to learn them and bring them up in shooting." Each village was, in 1541, required to maintain a pair of archery butts. It would seem that this statute was held to apply to school-boys and collegians. It is noteworthy that certain playgrounds at Eton and Harrow respectively, are still termed "the Shooting

<sup>1</sup> Remarks made at the meeting of the Section in Clinical Medicine, Pathology and Hygiene of the Massachusetts Medical Society, Suffolk District, June, 1886.

Fields" and "the Butts." The English took the lessons of the Crimean War so deeply to heart that, great as is their aversion to gymnastics, they introduced gymnastic drill into the army in imitation of their neighbors on the Continent.

The quickening and shaping influences of the Napoleonic Wars, of the War of Liberation, and of the wars with Austria and France, are clearly discernible as potent factors in the development and organization of the German system of physical training. France has, since 1871, organized an elaborate system of physical training, embracing both gymnastic exercises and military drill in connection with all its public schools for boys.

We in America occupy no exceptional position in this matter, unless it be that we are preternaturally slow to profit by the experience of other nations. The first attempts in America to promote physical training were of a military character. On January 21, 1790, President Washington transmitted to the first Senate of the United States a comprehensive report from General H. Knox, the Secretary of War, on a plan for "a national defense system adequate to the probable exigencies of the United States, whether arising from internal or external causes." The plan called for the enrollment of those liable to bear arms into three classes: the first comprehending the youth of eighteen, nineteen and twenty years of age, to be denominated the advanced corps; the second class including the men from twenty-one to forty-five years of age, to be denominated the main corps; the third class comprehending, inclusively, the men from forty-six to sixty years of age, to be denominated the reserved corps. It failed, however, of adoption, although the need of a well-trained militia had been sharply and abundantly emphasized by the events of the Revolutionary War. The failure was attributed to the great expense and the administrative difficulties which it was believed it would entail.

In 1792, a United States law was passed, which is still in force, I believe, requiring the enrollment of "all able-bodied male citizens of the respective States" between the ages of eighteen and forty-five years. All enrolled citizens are required to be "constantly provided with a good musket or fire locket . . . a sufficient bayonet and belt, two spare flints, and a knapsack, a pouch therein to contain not less than twenty-four cartridges . . . or with a good rifle, knapsack, shot-pouch, and powder-horn, twenty balls suited to the bore of his rifle, and one-fourth of a pound of powder." So far as I know, neither the Boston School Regiment, nor any other regiment, complies with the requirements of this law.

In 1817, in a report on the reorganization of the militia, made to the House of Representatives by Mr. Harrison, it was recommended that "military instruction should not be given in distant schools, but that it should form a branch of education in every school within the United States; that a corps of military instructors should be formed to attend to the gymnastic and elementary part of education in every school in the United States, whilst the more scientific part of the art of war should be communicated by professors of tactics, to be established in all the higher seminaries." It does not appear that this scheme, or anything like it, ever received the sanction of law, although it was again brought forward for adoption in 1819.

Meanwhile, the United States Military Academy at

West Point, in New York, had been instituted for the professional training of army officers. Yet the bitter lessons of the war of the Revolution had to be enforced by those of the War of 1812 before Congress could be induced to make anything like adequate provision for such training.

At West Point, bodily training, under the heads of military instruction and sword exercise, has received marked attention from the first. Dancing is now regularly taught, and gymnastics and swimming have at times been regular branches of instruction. The United States Naval Academy dates from the year 1845. Both at West Point and Annapolis the course of study is characterized by an extended, varied, and exacting system of bodily exercise, as embraced in the various drills and branches of practical instruction. The absolute control and constant supervision and inspection to which all cadets are subjected, as regards deportment, dress, studies, exercise, recreation, diet, and rest, are productive of a vigorous manliness which is much less uniformly found in the graduates of other institutions. I am strongly convinced that the best that has as yet been accomplished in the United States in physical training has been accomplished at West Point and at Annapolis, but nothing can be clearer than the fact that only a very small part of the training there in vogue is what is understood as military drill in the Boston schools.

Alden Partridge, captain of engineers in the United States Army, who was for a time Superintendent of the Military Academy, seems to have been the first person to found an institution modelled after that at West Point. Captain Partridge left the Military Academy in 1817, and in 1818 resigned from the military service of the Government. In a lecture delivered by him in 1820 on what he conceived to be the deficiencies of superior education as then conducted, Captain Partridge spoke as follows :

"Another defect in the present system is the entire neglect, in all our principal seminaries, of physical education. The great importance and even absolute necessity of a regular and systematic course of exercise for the preservation of health, and confirming and rendering vigorous the constitution, must be evident to the most superficial observer. That the health of the closest applicant may be preserved, when he is subjected to a regular and systematic course of exercises, I know from practical experience; and I have no hesitation in asserting that in nine cases out of ten it is just as easy for a youth, however hard he may study, to attain the age of manhood with a firm and vigorous constitution, as it is to grow up puny and debilitated, incapable of either bodily or mental exertion."

Captain Partridge opened his American Literary Scientific Academy at Norwich, Vt., his native town, September 4, 1820. In 1825, he removed his seminary to Middletown, Conn., where he remained for three years. He was doubtless impelled to abandon his seminary there from the refusal of the legislature of Connecticut to charter the institution as a college. He was instrumental, in 1834, in rehabilitating the institution at Norwich, which became known as "Norwich University," and in establishing military schools at Portsmouth, Va., in 1839, at Brandywine Springs, Del., 1853, and at Bristol, Pa., in 1853, the year of his death.

A considerable number of military schools and col-

leges, additional to those above mentioned, were organized before the War of the Rebellion. The more important of them were established in the Southern States, and were in several cases subsidized by the State. This was notably the case in Virginia, South Carolina, Louisiana, Kentucky, and Alabama. The Virginia Military Institute, at Lexington, Va., the Military Institute at Frankfort, Ky., and the Louisiana State Institute, at Alexandria, La., should be mentioned in this connection. It has been estimated that "one-tenth of the Confederate armies was commanded by the *élèves* of the Virginia Military Institute, at Lexington, embracing 3 major-generals, 30 brigadier-generals, 60 colonels, 50 lieutenant-colonels, 30 majors, 125 captains, 200 to 300 lieutenants." General "Stonewall" Jackson was long a professor in the Virginia Military Institute. General W. T. Sherman, of the United States Army, was in 1861 the head of the Louisiana State University, which had been organized on a military basis in the previous year. At the North the military plan of education was chiefly adopted by the proprietors of private schools for boys.

Once the war opened, military drill assumed a new and unprecedented interest in the eyes of school authorities. The educational literature of that period teems with schemes for the introduction of gymnastics and military drill into public school courses. As early as 1861 military drill was introduced into a portion of the public schools in the city of Bangor, Me.; and the State of New Jersey, about the same time, made an appropriation of money for military instruction in her normal school.

Elementary military drill was experimentally introduced into the Public Latin, English High, Eliot, and Dwight Schools for boys in Boston in 1863. It has since been eliminated from the grammar schools, to which class the Eliot and Dwight belong, but has been introduced into all the high schools of the city for males.

There are not far from sixty schools and colleges, in various parts of the country, in whose course of instruction military drill is given a prominent place. Public schools are not included in this number; but in nearly half of the number the military drill is in charge of an Army officer, specially detailed in accordance with Morrill Act of 1862, whose purpose was to promote the organization of State Mechanical and Agricultural Colleges.

The aim of the school system of Boston is, I take it, a general one, namely, to prepare boys and girls to enter with profit, at a later stage of their development, upon courses of special training for their life work, and the question under discussion is not whether military drill, by itself considered, is helpful or harmful, but whether so much of military drill as is laid down for a portion of the school-boys of Boston constitutes an adequate system of physical training.

I freely admit that the setting up drill, the manual of arms, and the marching movements as taught by General Moore are valuable; that they promote healthful growth and development to a limited degree; and that they subserve certain ends of mental and moral discipline. But I hold that they are so narrow, unnatural, and technical that they cannot be made to meet the legitimate demands of a sound system of general physical training. Such gymnastic exercises as you have witnessed here this evening demonstrate very satisfactorily, it seems to me, the superiority of

gymnastic to military drill. But it should be borne in mind that these exercises constitute but a small portion of the exercises which are comprised in any system of school gymnastics worthy to be so designated. It need hardly be said that no comprehensive system of gymnastics has ever been attempted in the Boston schools. No city in the United States, unless it be Kansas City, in Missouri, has as yet worked out or adopted a system of school gymnastics that will bear comparison with the systems now in vogue in the schools of the principal cities of Germany, Sweden, and Norway, France, Switzerland, and Austria.

It will be best to confine our attention to the German system of physical training, and more especially to that in vogue in Prussia.

The German for gymnastics is *Turnkunst* or *Turnen*. *Turnplatz* and *Turnhalle* correspond respectively to our terms out-door gymnasium and gymnasium, which latter ordinarily signifies a building for gymnastic exercises. A gymnasium, in the German sense, is the highest of the secondary schools, and leads directly to the University.

German gymnastics embrace three well-marked fields, or departments, namely, *Volksturnen*, or popular gymnastics; *Schulturnen*, or school gymnastics; and *Militärturnen*, or military gymnastics. The organization of the last two departments is maintained and controlled by the Government for strictly educational purposes; whereas the *Turnvereine*, as the societies of the turners are called, are voluntary associations of a social and semi-educational, but wholly popular and patriotic, nature. The germ of the turning system is to be found in the martial games and exercises of the ancient Teutons.

*Volksturnen* was the first to develop. It had its beginning in the period of Prussia's deepest distress and humiliation,—the period between the victory of the French at Jena, in 1806, and the War of Liberation in 1813. That turning became a popular institution and a potent factor in the development of Prussia was largely due to "Father Jahn," as the turners call him.

Jahn was an ardent patriot. His strong and rugged nature, and his eager, restless, passionate spirit, qualified him for popular leadership in the movement which he initiated. He seized the idea of making bodily training a force in national regeneration and education, and dreamed and wrote and labored for a free and united Germany.

The turners did notable service in the campaigns against the French, and great enthusiasm for gymnastics was kindled all over Germany. From 1819 till 1842 the *turnvereine*, as the gymnastic societies are called, were not suffered to exist by the Government.

In April, 1842, the ministers of war, the interior, and education, united in recommending to the King of Prussia the re-introduction of turning. In June following, the King gave his sanction to the proposal of his ministers that "bodily exercises should be acknowledged formally as a necessary and indispensable integral part of male education, and should be adopted as an agency in the education of the people." The King also authorized the establishment of "gymnastic institutes," in connection with "the Gymnasien, the higher middle schools, the training schools for teachers, and the division and brigade schools in the army."

The great majority of German *turnvereine* have,

since 1860, belonged to the organization known as the *Deutsche Turnerschaft*.

The *Turnerschaft* comprises fifteen circuits, or geographical divisions, within the German Empire and Austria. Each circuit is subdivided into districts (*Gaue*), and each district into societies (*Vereine*). On January 1, 1885, there were 220 *Turngaue* within the *Turnerschaft*, and the number of *vereine* within the *Turnerschaft* was 2,878, an increase of 223 over 1884. The membership in 1885 was 267,854, of whom 114,134 were active turners; or to express it differently, in 2,413 localities there was an active member of the *Turnerschaft* for every 134 of the population. In 1884, 2,409 societies practised winter turning, 353 owned a *turnplatz*, and 182 owned a *turnhalle*.

The aim of the *Turnerschaft* is to promote the interests of turning, as a means to bodily and moral strength. Its members are urged to render turning attractive to boys and apprentices who have passed the school age; to cultivate simple German customs and manners; to cultivate national exercises and games, such as free and class exercises, running, leaping, climbing, casting the weight, hurling the spear, wrestling, fencing, and sword play; to participate in all popular festivals, especially those commemorative of national events, such as the Kaiser's birthday, Sedan day, and the like; to manifest an active interest in useful public enterprises and associations, such as fire and salvage companies, and sanitary corps for the care and transportation of the sick and injured.

The turners are divided into two main sections, namely, boys from fourteen to seventeen years of age, and men. These divisions are subdivided according to their gymnastic ability into squads, or classes, each class being under the lead and guidance of a "foreturner" chosen on account of fitness. Strength alone is not enough. It is the foreturner's business to make his squad as expert as possible, and above all, to secure to each of its members an erect, firm, and graceful carriage of the body.

The General German Turning Festival, as the grand festival of the entire *Turnerschaft* is termed, occurs at intervals of at least four years. It continues for at least three days, one of which must be Sunday. Six such festivals have been held in different German cities since the first was celebrated at Coburg in 1860. The Sixth German Turning Festival was celebrated at Dresden, July 18-23, of last year. I was so fortunate as to be present during its continuance.

The festival was characteristically German in its object, arrangements, and detailed workings. In the opinion of competent judges a very considerable increase in gymnastic proficiency over that exhibited at any former festival was noticeable.

More than 20,000 turners, including delegations from England, France, Russia, Holland, Switzerland, Austria, Hungary, Sweden, and the United States took part in the street parade, which was reviewed by the King of Saxony from a balcony of his palace on Sunday, the first day of the festival. The grounds set apart for the use of the turners were something more than ten acres in extent, and were situated in the outskirts of the city, adjoining the *Grosser Garten*, the principal park of the King. Chief among the temporary buildings erected on the *Festplatz* was the festival hall, with an estimated capacity for 10,000 people. The main part of this hall was left unfloored, so that in case of unfavorable weather all the heavy gymnas-

tics might take place under cover. As the weather was fine during the entire continuance of the festival, the hall was used chiefly for speech-making and merry-making, and the turning of every description was carried on out of doors on the Turnplatz, which had an area of more than three quarters of an acre.

The most noteworthy gymnastic features of the festival were: The free gymnastics; the class turning of the most proficient turners; the prize turning, and the gymnastic games in which 1,600 girls and 1,200 boys belonging to the Dresden School took part.

The free gymnastics are bodily movements arranged in groups of related exercises, which are executed at command and in unison. In them no apparatus of any kind is made use of. They may be characterized as calisthenics raised to their highest power. The free gymnastics on this occasion included sixteen different movements, and required nearly three-quarters of an hour for their completion. The order and character of the movements had been determined and ordained by the proper committee of the Turnerschaft months before, and the movements had been practised by the different vereine at home, but only there. The turners who took part in the free movements numbered 4,544, and were formed in seventy-one "open ranks" of sixty-four men each, facing toward the front, the distance between the "files" being a full arm's-length. Facing the huge class was a high platform, on which two marvelously expert foreturners first executed each movement in sight of the class, and then, at signals given with a flag by the turnwart in command of the class, and re-enforced by strokes given on gongs in the middle of the field, the foreturners repeated the movement, the entire body of 4,500 men following in unison. The sight of 4,500 bareheaded, white-shirted men, many of them grayheaded, executing complicated movements, which involved tossing of the arms, bowing and bending of the trunk, facing now this way and now that, and all with military precision, in nearly perfect time, was a novel and inspiring one. Would that those who belittle gymnastics as a means of discipline could have seen the marching and facings of that class of 4,500 men.

The essential differences between Volksturnen and Schulturnen are based on the fact that the former is a free art, originating with and maintained by the common people, and the latter is a discipline imposed by authority upon persons in a state of pupilage. The ends of training and education are not lost sight of in Volksturnen, but in Schulturnen they occupy the foreground.

As regards physical training in the schools of Prussia, the case stands thus: Attendance upon instruction in turning is exacted of all unexcused pupils for two hours weekly in all schools for boys, and also, in some cities, in all schools for girls. As a rule, each school has its own turnhalle, and in very many cases its own turnplatz, furnished with appropriate gymnastic machines. Some cities, for instance Frankfurt-on-the-Main, provide special playgrounds for the use of school children and instruction in swimming.

While gymnastic drill is not universal in the public schools, it is very general. As might be expected, it is more common and better provided for in the cities than in the country. In 1882 only ten per cent. of the pupils in the higher schools for boys were excused from turning, and they were excused on the certifi-

cates of physicians that the exercise would be prejudicial to their health; only eighteen per cent. of this class of schools were obliged to discontinue turning in winter through having no proper turnhalle, and sixty per cent. of them possessed a turnhalle.

In the course of study each class has its special time for gymnastics, just as it has special hours set for arithmetic and reading, and in the majority of cases the instruction is given by one of the ordinary class teachers, and not by a special teacher of turning. The amount of time devoted to turning, singing, and drawing, is usually the same, viz., two hours weekly.

*The exercises are carefully adapted to the age, strength and sex of the pupils.* The youngest pupils, from six to ten years old, engage in a great variety of simple games, easy, free movements, marching, jumping and climbing exercises, and the fundamental exercises on the easier gymnastic machines. In free, light, and heavy gymnastics the exercises grow more complicated and difficult with the advancing age of the pupil. The expertness of the boys in the upper classes is often quite astonishing. In the Gymnasien and Realgymnasien fencing is taught in the upper classes. Pedestrian tours, skating parties, and excursions into the woods are frequently made under the lead of those who teach turning. The gymnastic course for girls comprises the ordinary free gymnastics; class gymnastics with "hand apparatus," such as dumb-bells, wands, and skipping ropes; marching, dancing, and balancing exercises; various games of ball, easy jumping, swinging, and climbing; and a few of the simpler exercises on the parallel and horizontal bars. Singing, especially during the march and the minuet, is frequently engaged in during the hour given to gymnastic instruction.

The population of Berlin in 1880 was 1,122,330. The total number of pupils in schools of every kind in the city was more than 149,000, of whom not more than 25,000 were in private schools. In schools wholly maintained at the city's expense, there were 104,726 pupils. Of the 62 turnhallen belonging to the city, 41 had turnplätze adjoining or near to them; 2 belonging to higher schools for girls; 11 belonged to higher schools for boys; and 48 belonged to schools of the grade of Volksschulen (termed in Berlin *Gemeindeschulen*); and 1 belonged to the Berlin Orphan Asylum. The city paid nearly \$50,000 in 1880-81 for the instruction given its school children in gymnastics, which sum is equal to about one twenty-third of its total expenditure for schools in that year.

The present number of city turnhallen used for educational purposes in Berlin is 98. The largest of them is the *Städtische Turnhalle*, in the Prinzenstrasse. This was established in 1864; it is open every day and evening, and is used at appointed times by several of the Berlin turnvereine, also by the association of Berlin teachers, the royal firemen, the normal classes for teachers of turning, and by eight of the city schools for school turning. In all, more than 13,000 persons exercise here weekly. The annual appropriation for its maintenance, exclusive of salaries, is between \$2,500 and \$3,000.

As a rule, the school gymnasia in Germany are separate and specially designed buildings, and not refitted rooms. As a class, the German gymnasia are not so luxuriously fitted or so architecturally imposing as many of the newer American college gymnasia, but they are admirably adapted to the purpose of teaching

of free and class gymnastics of every description. As much as possible the apparatus is adjustable and portable. A plain, one-story, brick turnhalle, 60 by 33 feet and 15 to 20 feet high, can be built in Germany at a cost of \$5,000, and well furnished with apparatus for \$1,000.

In this connection the following facts regarding the Volksschulen of Vienna may be of interest: In 1882-83 Vienna, whose population in 1880 was 704,756, had 72,912 pupils in its 135 Volksschulen. Of this number 44,614 (21,047 of whom were girls) practised turning under the guidance of 658 teachers. The city paid for the teaching of turning and the care of the turnhallen in 1882-83, a sum equal to \$34,860, or one-twentieth as much as its total ordinary expenditure for the Volksschulen.

The Prussian schools and the Prussian army are admitted to be the best of their kind. It is a fact of capital importance that in the foremost military State of all the world, not only is military drill excluded from the system of public instruction, but it is also held to be insufficient for purely military purposes, and an elaborate system of gymnastics has been adopted for the training of the soldiery. Even in the cadet schools, boys under fourteen years of age are not allowed to drill with muskets. In Prussia as in other parts of Germany, it has often been proposed to make military drill a part of the instruction for boys. The proposition has been widely and fully discussed, but the weight of the best opinion, educational and military, have been against it. Such experiments as have been made in the direction of giving the schools a military character have not succeeded. On physiological, educational, and military grounds, the authorities prefer gymnastics to military drill, both as a means of securing the symmetrical development of the bodily powers, and as a preliminary training for efficient service in the army. Military drill, say the best of the Germans, is, if genuine, too stiff and severe for school boys; while, if it be not genuine, its moral effects are bad and its tendency is towards the formation of vicious habits of carriage and movement.

Gymnastics and military drill have been made obligatory in practically all public schools for boys throughout the French republic. It is a little more than four years since the French government passed a law requiring the enrollment of all able-bodied boys over twelve years of age in the so-called *bataillons scolaires*. The boys wear a sort of uniform, and are dubbed with muskets, and figure with the rest of the troops on July 13th, the day of the National Festival.

The Germans look with disfavor, but not with fear, upon this movement of the French. It is somewhat too early to pronounce upon the success of the experiment, but there are indications that it is not fulfilling the claims of those who were instrumental in causing it to be made. One of the French military journals characterizes the movement as "a useless phantasmagoria," and General Millot says: "Do not let childhood play at soldiering. The musket should not be taken in hand too soon. It is only in the barracks that the military training of a young man is properly given. Train gymnasts for us; our officers and under-officers will soon make good soldiers of them."

The best exponent of the German system of training in this country is the North American Turnerbund, which comprises more than two hundred societies or *Vereine*, and has a total membership of more than

21,000. In the Turnschulen of the Bund, 12,228 boys and 4,005 girls received instruction in gymnastics in the year 1884-85. It is very remarkable that the ignorance of American educators should be as dense as it is regarding the aims and achievements of the Turnerbund, which has maintained a special Normal School for the training of teachers of turning for many years in the city of Milwaukee. Yet the fact is that the Turnerbund owns more gymnasia than all the colleges of the country put together, and its corps of trained and salaried teachers, numbering nearly one hundred, is the best the country affords.

The German system of school turning embraces free movements, light gymnastics, and heavy gymnastics, all of which may easily be taught to school or college classes, provided you have competent teachers and a well-equipped gymnasium. The German system of physical training is a practical system, based upon sound physiological and pedagogical principles. It is managed by specially-trained teachers, who have perfectly definite ends in view, and its results are admirable. The average American college boy compares, as regards educated bodily ability, with his contemporaries in the upper classes of the gymnasium of Berlin and Frankfort, as do children who can print and one learning to write with the most accomplished pupils of drawing in your city schools.

If the School Committee of Boston shall ever really undertake to provide for the physical training of those committed to its charge, it will do well to profit by the example and experience of such enlightened States as Prussia. To do so it must bring gymnastic training for boys and girls to the front, and send military drill to the rear, or abolish it altogether.

## RECENT PROGRESS IN DISEASES OF THE NERVOUS SYSTEM.

BY PHILIP COOMBS KNAPP, M.D.

### PROGRESSIVE ATROPHIC MYOPATHY.

RECENT investigations have shown that there was a certain amount of truth on either side in the dispute that was once waged over the essential nature of progressive muscular atrophy. The spinal nature of the atrophy of Duchenne-Aran is now well established, but the recent work of Landouzy and Dejerine<sup>1</sup> shows that there is another form of progressive muscular atrophy which is essentially a pure myopathy. They have made a careful study of six different cases, occurring in two different families, and give a report of the autopsy in one case. In one family there had been nine cases in five generations, in the other two cases in three generations; the affection thus manifesting a distinctly hereditary type.

The disease usually begins in early childhood, making its first appearance about the age of three or four, but it may come on later in life. If it begins in childhood, the muscles of the face are first involved, the face seems to have a mask over it, the forehead is smooth, the wrinkles are abolished, the eyes seem wider open, and are not perfectly closed, and the lips protrude. The child has a dull, expressionless look, almost like that of an imbecile, although the intellec-

<sup>1</sup> L. Landouzy et J. Dejerine. De la myopathie atrophique progressive, myopathie sans neuropathie, debutant d'ordinaire dans l'enfance par la face. Revue de Médecine, Feb., April, 1885.