VAGINAL MOVEMENTS.—Dr. Jastreboff has made a series of experiments upon the vagina of rabbits, and arrived at the following conclusions :

1. In the wall of the vagina are automatic nerve-centres which cause rhythmic contraction of the separate segments.

2. A direct electric tetanization of the vagina causes peristaltic contractions.

3. Weak irritation of the central end of the sciatic causes anti-peristaltic contractions.

4. Extreme anæmia causes an increase of the vaginal peristalsis. —*Archiv für Physiologie*, von Du Bois-Reymond, 1884, Heft 6.

IS THE NERVOUS IMPULSE DELAYED IN THE MOTOR-NERVE TERMINATIONS?—Dr. Hoisholt has made a series of experiments upon this subject, using the nerves of frogs. His results were as follows : A preponderance of the maximum contraction by direct stimulation of the muscle. A great difference in the latent period by stimulation of the nerve-trunk near the hilus, and of the muscle-substance rich in nerves. This is ascribed by Bernstein to a delay in the process of stimulation at the motor-nerve terminations, where the amount of latent power set free is to accumulate until it equals the stimulus necessary for the muscle. More probably, however, it is dependent upon the summation of stimulus. A latent period by stimulation of nerveless muscle-substance, which, in some cases, was the same as that resulting from nerve stimulation, more frequently, instead of being shorter, was longer than the latent period obtained by stimulation of the nerve. Although this last paradoxical result remains inexplicable, the related experiments render at least an affirmative answer to the question heading this article highly improbable.—*Journal of Physiology*, vol. vi., Nos. 1 and 2. ISAAC OTT, M.D.

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c.—GENERAL PATHOLOGY OF THE NERVOUS SYSTEM.

DOUBLE INFANTILE SPASTIC HEMIPLEGIA.—In the January number of the *American Jour. of the Med. Sciences*, Dr. S. J. McNutt reports a case of double infantile spastic hemiplegia, with carefully recorded notes of the post-mortem appearances, illustrated with seven cuts, exhibiting the lesions found. This is believed to be the third, or, at the most, the fourth, case of its kind upon record. Dr. McNutt has collected and tabulated thirty-four cases in which autopsies have been made, and each of them presented atrophy of the cerebral cortex, near the fissure of Rolando. The main features of the cases having autopsies are presented in the following table :

No.	Physician.	Sex and Age.	Seizure.	Symptoms.	Autopsy.	By whom reported and where.
1	Heschl,	M. 26 yrs	From birth left extremities weak.	Left hemiplegia; contractures; speech impaired.	Central segment centrum ovale with convolutions pertaining to it absent on right side from the convexity to the fissure of Sylvius.	Kundrat, Die Porencephalie, 1882.
2	Heschl,	F. 7 yrs	. . . .	Right hemiplegia, with contractures.	Absence of ascending convolutions; left hemisphere defective, communicates with lateral ventricle of that side.	Kundrat, Die Porencephalie, 1882.
3	Brechet,	F. 3½ yrs	. . . .	Rigbt hemiplegia, atrophy.	Left hemisphere defective.	Kundrat, Die Porencephalie, 1882.
4	Maschede,	F. 27 yrs	. . . .	Left hemiplegia.	Right parietal bone defective ½ in. behind coronal suture, the opening 3 in. by ½ to 1 in. Right hemisphere presents cavity in posterior half. Walls of connective tissue of neighboring convolutions rusty brown.	Kundrat, Die Porencephalie, 1882.
5	Rogers,	M. 41 yrs	When 15 yrs unconscious 3 weeks; recovered with paralysis of left leg and arm.	Left hemiplegia with atrophy.	Anterior half of right hemisphere atrophied.	Kundrat, Die Porencephalie, 1882.
6	Rogers,	M. 49 yrs	Dates from convulsions in youth.	Right hemiplegia; weak-minded.	Left hemisphere has a cavity connected with ventricle.	Kundrat, Die Porencephalie, 1882.
7	Hugel,	F. 5 yrs	Asphyxiated at birth.	Left hemiplegia.	Right hemisphere presents an excavation in anterior half 1½ x 2 x ⅔ in.	Kundrat, Die Porencephalie, 1882.
8	Brodowski,	F. 12 yrs	. . . .	Right hemiplegia; strabismus, nystagmus.	Communication between fissure of Sylvius and ventricle. Surrounding convolutions converge into this cavity.	Kundrat, Die Porencephalie, 1882.
9	Kundrat,	M. 15 mo	. . . .	Left hemiplegia, contractures.	Right hemisphere atrophied, especially about fissure of Rolando.	Kundrat, Die Porencephalie, 1882.
10	Kundrat,	F. 5 yrs	1 year before death.	Double hemiplegia; idiocy.	Atrophy about lower ⅔ fissure of Rolando; right more affected than left. Sulcus communicates with lateral ventricle. Septum pellucidum absent.	Kundrat, Die Porencephalie, 1882.
11	Sperling,	F. 29 yrs	Difficult labor.	Hemiplegic at birth; shortening of the arm and leg, contractures of hand; intelligent, was a chorister.	Depression behind fissure of Rolando, including the ascending parietal convolution; cicatricial tissue and pigment.	Kundrat, Die Porencephalie, 1882.
12	Cazauvieilh	F. 59 yrs	. . . .	Left hemiplegia, contractures; sensibility and intellect not impaired.	Convolutions of rigbt hemisphere less developed than left.	Cazauvieilb, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.
13	Cazauvieilh	F. 51 yrs	. . . .	Right hemiplegia, including face; right mamma undeveloped	Convolutions left hemisphere less developed than right; intellect obtuse.	Cazauvieilh, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.

No.	Physician.	Sex and Age.	Seizure.	Symptoms.	Autopsy.	By whom reported and where.
14	Cazauvieilh	F. 42 yrs	. . . .	Left side paralyzed and undeveloped.	Right hemisphere atrophied.	Cazauvieilh, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.
15	Cazauvieilh	F. 30 yrs	. . . .	Left half of body emaciated, especially leg; mouth drawn to right side. Epileptic; voracious appetite; intellect obtuse.	Left hemisphere defective.	Cazauvieilh, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.
16	Cazauvieilh	F. 68 yrs	From birth.	No voluntary movements; right side of mouth drawn to left; contractures.	In posterior part of left frontal lobe, a cavity having an "accidental" opening into the ventricle.	Cazauvieilh, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.
17	Cazauvieilh	F. 27 yrs	. . . .	Right hemiplegia with atrophy.	Left frontal lobe less prominent than right.	Cazauvieilh, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.
18	Morgagni,	. . .	. . . .	Hemiplegia.	Atrophied zone from convexity to base, in frontal lobe, most marked in medullary substance.	Cazauvieilh, *Arch. Gén. de Méd.*, 1827, xiv., p. 5.
19	Little,	18 yrs	Instrumental delivery; mother died.	Right hemiplegia with atrophy and contractures.	Whole left hemisphere atrophied; surface of right hemisphere cicatrized with remnant of old clot.	Little, *Trans. Obst. Soc.*, London, 1862.
20	Gibb,	Stillborn.	Mother during pregnancy received an accidental blow on abdomen by a board.	Rigid contractures of joints of limbs of left side, without breaking tendons could not be extended.	Right parietal bone ecchymosed; remains of old clot in right hemispheres above ventricle.	Gibb, *Lancet*, Nov. 13, 1858.
21	Pullain,	F. 8 yrs	. . . .	Atrophy right extremities; intelligence small.	Left hemisphere smaller than right.	Steffen, *Gerhardt's Hdb. Kinderkrankheiten*, xix., p. 243.
22	Bourneville,	F. 16 yrs	At 16 mos. with spasms of right extremities.	Right hemiplegia, atrophy.	Atrophy of left hemisphere, especially of ascending frontal, ascending parietal, paracentral lobule, and 1st frontal convolution.	Steffen, *Gerhardt's Hdb. Kinderkrankheiten*, xix., p. 243.
23	Henoch,	F. 19 yrs	At 3 mos. convulsions, followed by paralysis.	Right hemiplegia, atrophy, contractures; speaks in one syllable; intellect poor.	Middle upper part of left hemisphere occupied by cyst; right pyramid ¼ normal size; hematoidin crystals in wall of cyst.	Henoch, Hd. f. d. Kinderkrankh., 1883, p. 231.
24	Henoch,	F. 12 yrs	. . . .	Right hemiplegia, atrophy, contractures.	All convolutions of left hemisphere small, rusty-brown color; pia adherent.	Henoch, Hd. f. d. Kinderkrankh., 1883, p. 231.
25	Henoch,	F. 5 yrs	Healthy to 1½ yrs. After carriage accident suddenly paralyzed.	Left hemiplegia; destructive temperament; speech impaired.	Right upper frontal convolution atrophied posteriorly; dense and white.	Henoch, Hd. f. d. Kinderkrankh., 1883, p. 231.
26	Henoch,	M. 6 yrs	Healthy to 6 months, then had measles with convulsions 8 days, followed by general muscular rigidity.	Double hemiplegia, contractures; stuttering, imbecility.	1st frontal convolution on both sides atrophied, also 2d, but in less degree. Corpus callosum, fornix, and septum lucidum atrophied.	Henoch, Hd. f. d. Kinderkrankh., 1883, p. 231.

No.	Physician.	Sex and Age.	Seizure.	Symptoms.	Autopsy.	By whom reported and where.
27	Rénoy,	F. 4 yrs	From convulsions at birth.	Left hemiplegia, contractures, strabismus; spoke badly, intelligence weak.	Atrophied right hemisphere, especially about fissure of Rolando, with secondary degeneration of pyramidal tracts.	Rénoy, *Progrès Méd.*, 1879, p. 769.
28	Huebner,	2¾ yrs	When 15 months had fever with convulsions, followed by complete paralysis.	Double hemiplegia, contractures of extremities; little intelligence, no speech.	Atrophy of both ascending convolutions of left hemisphere, with anterior part of right inferior parietal lobule; right lenticular nucleus. Anterior half of pons, with pyramidal tracts in it destroyed. Embolus found in right middle cerebral artery from root to bifurcation.	Huebner, *Berl. klin. Wochenschr.*, 1882, p. 737.
29	Suckling,	. . .	. . . .	Hemiplegia, contractures, atrophy, epilepsy.	Atrophy about fissure of Rolando.	Suckling, *Bir. Med. Rev.*, 1883, p. 55.
30	Ross,	F. 2½ yrs	Congenital.	Double hemiplegia; monosyllabic speech.	Sulcus occupying central convolutions on both sides; bottom sulcus opened into lateral ventricle; pyramids and lateral columns small. No cicatricial tissue. Giant cells of third layer absent in atrophied part.	Ross, Dis. Nerv. Syst., 1883, vol. ii., p. 480.
31	Lambl,	F. 12 yrs	. . . .	Right hemiplegia, strabismus, nystagmus; intelligence good; practised clairvoyance.	Depression in left hemisphere occupying fissure of Sylvius; lower part of ascending convolution of island of Reil and anterior part of first temporal convolution atrophied.	Lambl, *Arch. d. Psych. u. Nervenheilkunde.*
32	Lachi,	F. 44 yrs	. . . .	Right hemiplegia, with weakness of left leg; atrophy and contractures.	Atrophy about anterior part of fissure of Sylvius on left side; bottom of fissure opens into ventricle; septum lucidum absent.	Lachi, *Rev. Clinical*, Feb. 1884, p. 152.
33	Blanchi,	M. 73 yrs	Convulsions in early infancy.	Right hemiplegia, with weakness of left leg; atrophy and contractures.	Deep sulcus occupying central convolutions of left hemisphere, communicating with ventricle. Similar sulcus occupying superior third of central convolutions of right hemisphere. Paracentral lobule not affected. No descending degeneration.	Bianchi, Abst. *Am. J. Neurol. and Psychiatry.*
34	McNutt,	F. 2½ yrs	Feet presented; instrumental delivery; convulsions for 9 days after birth.	Double hemiplegia, contractures, dysphagia, and dyspnœa; intelligence small.	Atrophy about the fissure of Rolando on both sides. Atrophy affects most the base of convolution, giving mushroom shape. Descending degeneration of both pyramidal tracts. Atrophy of larynx with puckering of mucous membrane over vocal cords.	McNutt, *Amer. Jour. Med. Sci.*, Jan., 1885.

A CONTRIBUTION TO JACKSONIAN EPILEPSY AND THE SITUATION OF THE LEG CENTRE.—Dr. William Osler, of the University of Pennsylvania, records, in the January issue of *The American Journal of the Medical Sciences*, the history of an instructive case of Jacksonian epilepsy. His case lasted over fourteen years, the convulsions beginning in the left hand, at first monobrachial, then extending to the leg, afterwards becoming unilateral, and finally general; at first without loss of consciousness. For the last nine years of the illness there were remarkable intermissions, lasting for six or seven months, once an entire year. Six months after the onset the left leg got weak and stiff. For four years, the tenth, eleventh, twelfth, and thirteenth of the illness, the seizures were frequent. During this period there were six weeks of unconsciousness in which the spasms were very frequent, fifty to eighty in the day. Ten months prior to the final attacks there was freedom from convulsions. The intellectual faculties were unimpaired. The case is unusual in the limitation of the lesion to the ascending frontal convolution, and to its fasciculus of white matter, scarcely involving the gray substance, which is commonly affected in cortical epilepsy. The accurate localization, and the remarkable absence of tissue-changes in the immediate vicinity, give the case the nature of an exact physiological experiment. With this limited lesion of the motor area, there was permanent paralysis with contracture of one extremity and epileptiform convulsions. Another feature of interest in the case is the light it throws on the situation of the leg centre. The fibrous mass was situated entirely within the anterior part of the paracentral lobule, limited in extent, confined chiefly to the medullary fibres of the superior frontal fasciculus, and only touched the gray matter in places. A point to be referred to is the absence of the paralysis of the leg for the first six years, for, if the convulsions and monoplegia were caused by the same lesion, how explain the late onset of the latter? From the fibroid state of the tumor it might reasonably be inferred that it was originally larger and had shrunk, but the absence of puckering on the surface, and the way in which the margins merged with the contiguous parts, make it probable that the growth was always small—so small, in fact, that at one period of its development, it may have caused sufficient irritation to induce the convulsions, and yet at the same time not involve the special fasciculi of white fibres to the extent of producing weakness of the leg or monoplegia.

A CASE OF LODGMENT OF A BREECH-PIN IN THE BRAIN; RECOVERY.—Dr. G. W. H. Kemper, of Muncie, Indiana, reports in the January number of *The American Journal of the Medical Sciences*, a very instructive case in which a lad received a compound fracture of the frontal bone, immediately above the right frontal sinus, by a bursting gun. The breech-pin was found imbedded in the brain at a distance of one-half inch, and was withdrawn by the aid