SHTERN, I.A.; PAVLOVA, L.S.

Problem of rationalnutrition during pregnancy for the prevention of toxemias of pregnancy and for the normal development of the intrauterine fetus and newborn. Akush.i gin. 36 no.1:26-31 Ja-F '60. (MIRA 13:10)

(PREGNANCY) (DIET)

SHTERN, I.A.; KOROLEVA, A.M.

Isoimmunization of pregnant women with Rh-positive blood. Akush. i gin. 36 no.2:75-79 Mr-Ap '60. (MIRA 13:12)
(RH FACTOR) (PREGNANCY)

SHTERN, I.A.

Role of staphylococcal infections in diseases of newborn infants.
Pediatriia 38 no. 3:3-8 Mr '60. (MIRA 14:1)
(INFANTS (NEWBORN)—DISEASES) (STAPHYLOCOCCAL INFECTION)

SHTERN, I. A., prof.

Measures used in lowering the death rate among newborn and older infants. Pediatriia no.11:3-11 '61. (MIRA 14:12)

1. Iz detskoy kliniki (zav. - prof. I. A. Shtern) Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta akusherstva i ginekologii (dir. - kandidat meditsinskikh nauk O. D. Matspanova, nauchnyy rukovoditel' - prof. A. V. Lankovits)

(INFANTS(NEWBORN)--MORTALITY)

SHTERN, I.A., prof.

Some marginal questions in the pathology of newborn infants. (MIRA 14:6)
Akush.i gin. 37 no.1:17-22 '61.

1. Iz Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta akusherstva i ginekologii (dir. - kand.med.nauk O.D. Matspanova; nauchnyy rukovoditel' - prof. V.P. Mikhaylov).
(INFANTS (NEWBORN--DISEASES)

SHTYGIN, I. ., prof.; KOROLEVA, A.M., kand. med. nauk; PAVLOVA, L.S., kand. med. nauk

Late results of the prophylaxis and therapy of erythroblastosis fetalis. Akush. i gin. no.1:101-106 '63. (MIRA 17:6)

1. Iz Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta akusherstva i ginekologii (dir. - kand. med. nauk O. I. Matspanova, nauchnyy rukovoditel' - prof. V.F. Mikhaylov).

SHTERN, I.A., inzh.; PLOTNIKOV, I.V., kand. tekhn. nauk; PAVLOV, S.A., doktor tekhn. nauk, prof.

Investigating the washing out of pore building agents from carboxyl-containing rubbers. Izv. vys. ucheb. zav.; tekh. leg. prom. no.2:48-54 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh materialov i iskusstvennoy kozhi (for Shtern, Plotnikov). 2. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti (for Pavlov). Rekomendovana kafedroy tekhnologii iskusstvennoy kozhi i plenochnykh materialov.

SHTERN, I.A., prof.; KOROLEVA, A.M., kand. med. nauk

Isosensitization of pregnant women in ABO incompatibility of the mother and fetus. Vop. okhr. materin. dets. 8 no.1: 39-44 '63 (MIRA 17:2)

1. Iz detskoy kliniki (zav. - prof. I.A.Shtern) i laboratorii (zav. - kand. med. nauk A.M.Koroleva) Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta akusherstva i ginekologii (dir. - kand. med. nauk O.D.Matspanova, nauchnyy rukovoditel' prof. A.V.Lankovits).

BELYAYEV, Ye.I., prof. [deceased]; BADYUK, Ye.Ye.; BOGOROV, I.I., prof.; BUBLICHENKO, L.I., prof.[deceased]; IL'IN, I.V., dots.; KEYLIN, S.L., prof.; MAZHBITS, A.M., prof.; MALININ, A.I., zasl. deyatel' Kaz.SSR, prof.; MOSHKOV, B.N., prof.; NIKOLAYEV, A.P., prof.; PERSIANINOV, L.S., prof.; POKROVSKIY, V.A., prof.; POLYAKOVA, G.P., kand. med. nauk; RAFAL'KES, S.B., dots.; KHASKIN, S.G., prof.; SHTERN, I.A., prof

[Multivolume manual on obstetrics and gynecology] Mnogotomnoe rukovodstvo po akusherstvu i ginekologii. Moskva, Meditsina. Vol.3. Book 2. [Pathology of the labor and postnatal period. Physiology and pathology of the newborn infant] Patologiia rodov i poslerodovogo perioda. Fiziologiia i patologiia novorozhdennogo. Pt.1.[Pathology of labor] Patologiia rodov. 1964. 895 p. (MIRA 17:7)

1. Chlen-korrespondent AMN SSSR (for Persianinov). 2. Deystvitel'nyy chlen AMN SSSR (for Nikolayev).

KIPNIS, Yu.B.; SHTERN, I.A.; PLOTNIKOV, I.V.; PAVLOV, N.N.; PAVLOV, S.A.

Use of modified polyamides for the finishing of artificial leather based on rubber. Kozh.-obuv. prom. 6 no.5:31-34 My '64. (MIRA 17:12)

[redacted], I. B.

"[redacted] Method for Determining the Glycose Tissues" II No. 1, 1949. (Ch., Lab of Brain Morphology, Inst. of Defectology, Acad. of Pedagogical Sciences, Moscow) -1p(R)-.

Dr. Medical Sci.

[redacted], E. P.

"[redacted] of Bilchowsky's Method for Studying Colloidinous Material" Arkh. Patol. XX No. 5, 1958. (Lab. of Brain, Morphology, Inst. of Defectology, Acad. of Pedagogical Sciences RSFSR) -1958-.

Dr. Medical Sci.

SHTERN, I.B.

Participation of neurologic elements in myelination of central neural fibers. Arkh. anat., Moskva 29 no.6:50-59 Nov-Dec 1952. (CLML 23:4)

1. Of the Laboratory of Pathomorphology of the Brain (Head -- Doctor Medical Sciences I. B. Shtern), Scientific-Research Institute of Defectology of the Academy of Pedagogic Sciences RSFSR (Director -- Candidate Pedagogic Sciences A. I. D'yachkov).

SHTERN, I.B.

Morphological characteristics of the central end of the auditory and speech-motor analysors in subjects deafened at the early age. Vest. otorinolar., Moskva 15 no.4:40-44 July-Aug 1953. (CIML 25:1)

1. Doctor Medical Sciences. 2. Of the Laboratory of Pathomorphology of the Brain of the Scientific-Research Institute of Defectology of the Academy of Pedagogic Sciences RSFSR.

[illegible], I.Ya., nauchnyy sotrudnik; [illegible], I.V., nauchnyy sotrudnik; [illegible], I.I., nauchnyy sotrudnik

Use of pigments for printing.. Tekst. prom. 21 no.10:57-60 O '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni K.Ye. Voroshilova (VNIOPik).
(Textile printing)
(Pigments)

SHTERN, I.Ya.; FODIMAN, I.V.; RAYKHMAN, N.M.

Pigment dyeing of fabrics. Tekst.prom. 22 no.1:62-64 Ja '62.
(MIRA 15:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.
(Textile fabrics) (Dyes and dyeing)

SERGEYEVA, Z.I.; SHTERN, I.Ya.; KUZ'MINA, N.L.; EUVINA, S.M.,
Prinimali uchastiye: SPIRKINA, V.I.; SAMSONOV, V.D.; GULINKINA, I.R.

Dyeing of elastic foam polyurethan and the application of a printed pattern to it. Plast.massy no.2:25-27 '62. (MIRA 15:2)
(Plastics) (Polyurethan)

L 44368-66 EWT(m)/EWP(j)/T/EWP(v) IJP(c) RM/WW

ACC NR: AP6023062 (A) SOURCE CODE: UR/0191/66/000/004/0024/0026

AUTHOR: Volk, A. I.; Timofeyev, N. Ya.; Veprinskaya, M. N.; Shtern, K. A.; Kozorovitskiy, V. R.

ORG: none

33 B

TITLE: Investigation of the technological parameters for the continuous production of the polyester glass-plastic laminates

SOURCE: Plasticheskiye massy, no. 4, 1966, 24-26

TOPIC TAGS: laminated glass, laminated plastic, synthetic material, styrene

ABSTRACT: The effect of styrene content in the binder (18-34%), temperature of charge make-up (20°-60°C), and duration of charge gelatinization (3-9 minutes) on the mechanical properties of polyester glass-plastic laminates was investigated. The binder was composed of styrene and polydiethyleneglicolmaleinatephthalate. Polymerization of the laminates was conducted at 80°C using 1.5% benzoyl peroxide initiator. It was found that the higher the styrene content, the greater the rate of binder hardening. The best mechanical properties of laminates (highest bending strength) resulted from the use of binders containing 26-33% styrene. Orig. art. has: 2 figures, 3 tables.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 002

UDC: 678.06-419 : 677.521 : 69-932

Card 1/1

ACC NR: AP6024049 (A) SOURCE CODE: UR/0191/66/000/005/0032/0033

AUTHOR: Volk, A. I.; Shtern, K. A.; Timofeyev, N. Ya.; Voprinskaya, M. N.

ORG: none

TITLE: Effect of certain initiating systems on the setting of a binder for sheet fiber-glass reinforced plastics

SOURCE: Plasticheskiye massy, no. 5, 1966, 32-33

TOPIC TAGS: polyester resin, peroxide, copolymerization, reinforced plastic, polymerization initiator

ABSTRACT: The purpose of the work was to determine the type and amount of initiating admixtures promoting the copolymerization of polydiethylene glycol maleate phthalate resin with styrene (PN-1 resin) at 80-85°C. Combinations of pairs of peroxy compounds were chosen such that the activity of one peroxide manifested itself at a moderate temperature (70-80°C), and the activity of the other, at 100-120°C. Thus, the heat evolved by the action of the first, more active peroxide, leads to the initiation of the polymerization reaction by the second peroxide, whose decomposition temperature is higher. The following pairs were employed: benzoyl peroxide (BP) - methyl ethyl ketone peroxide (MEKP); BP - cyclohexanone peroxide (CHP); BP - cumene hydroperoxide (CHP). Graphs of variation of the temperature in the sample with time, characterizing the course of the exothermic process of copolymerization, were plotted. In all

Card 1/2 UDC: 678.744.5.06-419.8:677.521:678.044.5

L 45859-66

ACC NR: AF6024049

cases, the use of pairs of peroxy compounds caused a faster setting of the polyester binder than in the case of each peroxide individually, and the ultimate strength in static bending was increased. The data obtained may be utilized in the manufacture of sheet fiber-glass reinforced plastics. Orig. art. has: 3 figures and 1 table.

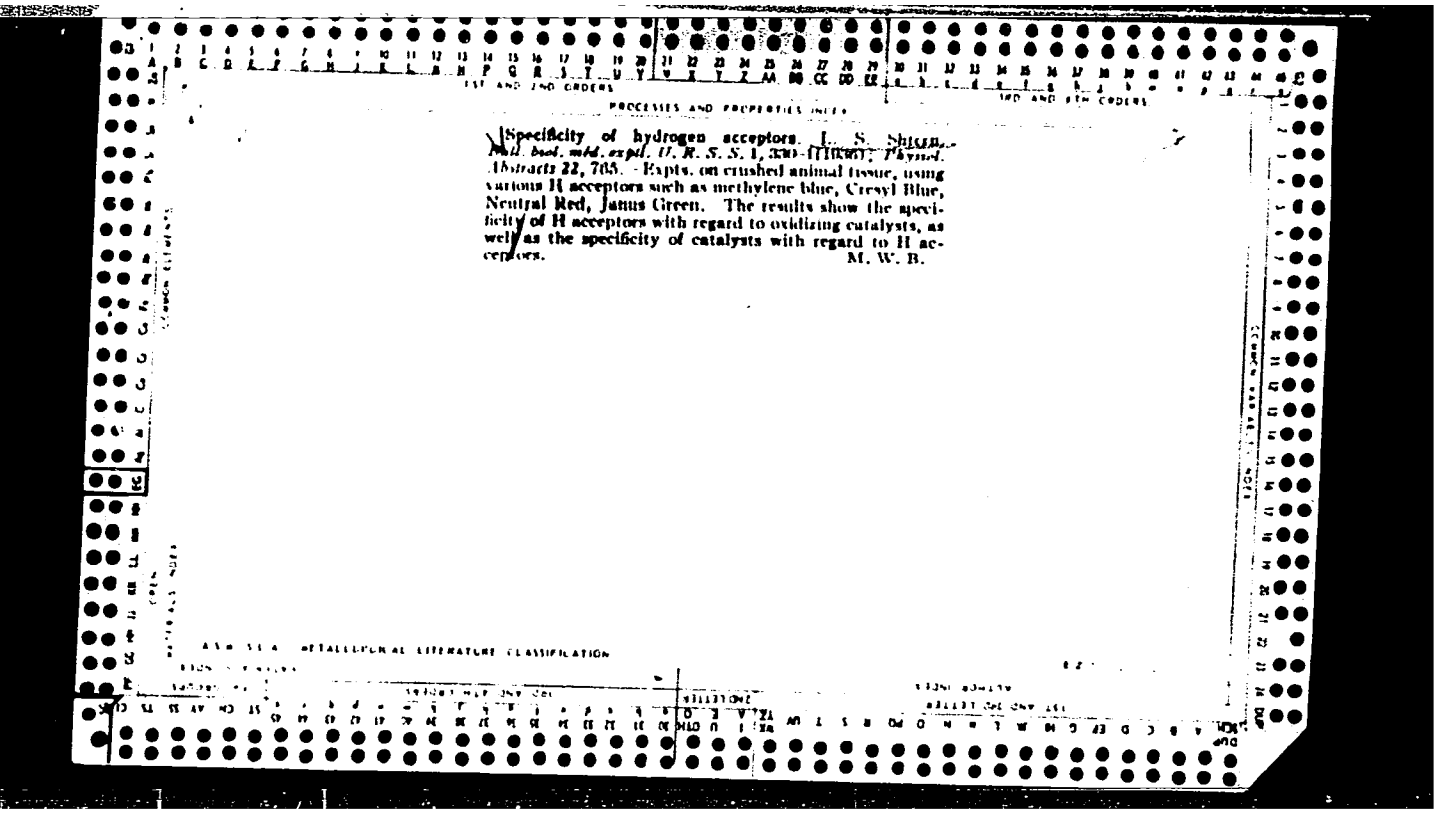
SUB CODE: 11/ SUBM DATE: none/ OTH REF: 003 / SOV REF: 001

Card 2/2 LC

SHTERN, Lidiya Petrovna

Of the Substitution of Defective Long Tubular Bones with Autotransplantation

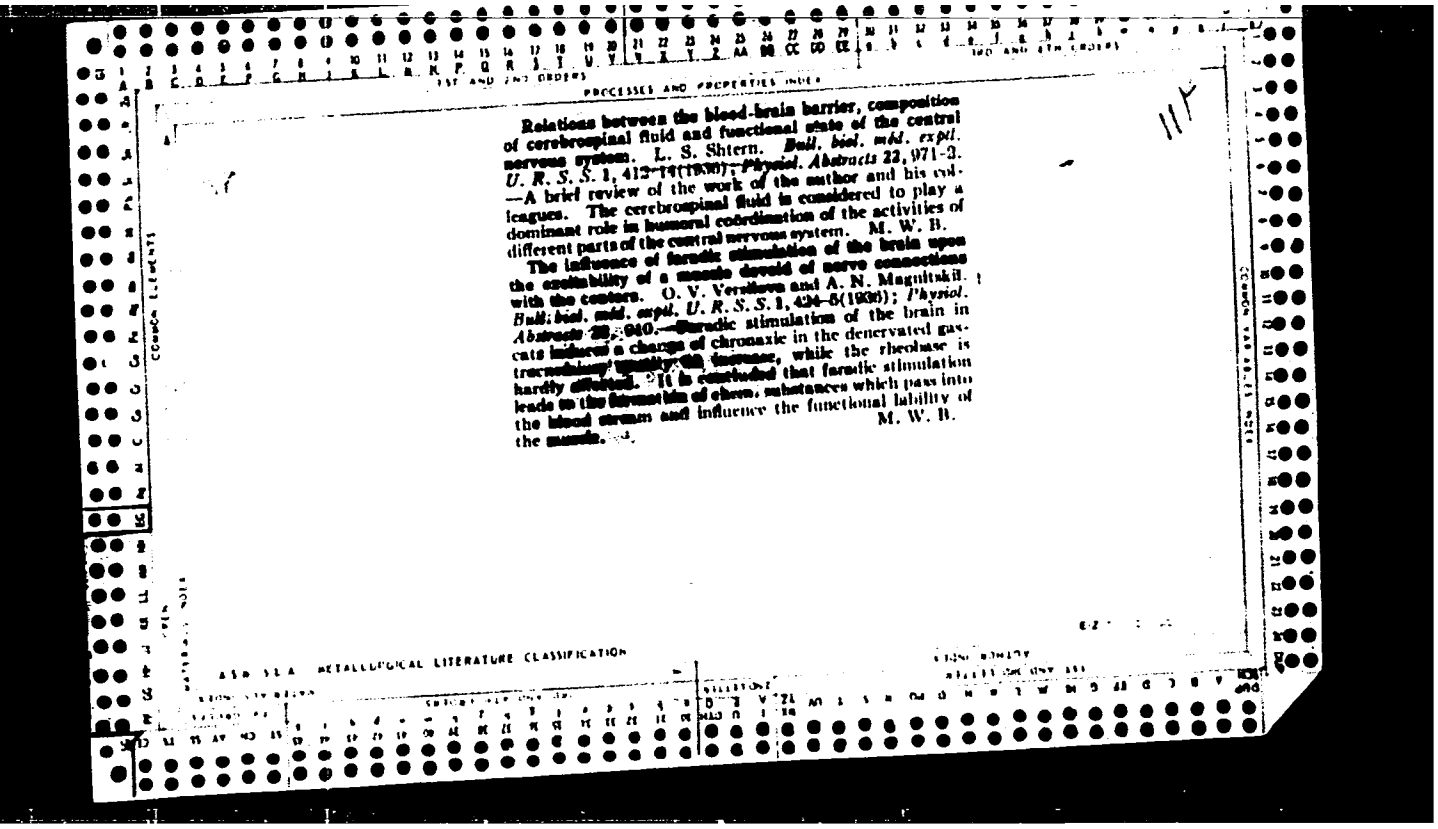
Dissertation for candidate of a Medical Science degree. Saratov ("N.I.I. VOSKHITO",), 1951



PROCESSES AND PROPERTIES INDEX

Specificity of hydrogen acceptors. L. S. Shugam. *Bull. biol. méd. expil. U. R. S. S.* 1, 330-[illegible]; *Physiol. Abstracts* 22, 705. - Expts. on crushed animal tissue, using various H acceptors such as methylene blue, Cresyl Blue, Neutral Red, Janus Green. The results show the specificity of H acceptors with regard to oxidizing catalysts, as well as the specificity of catalysts with regard to H acceptors. M. W. B.

METALLURGICAL LITERATURE CLASSIFICATION



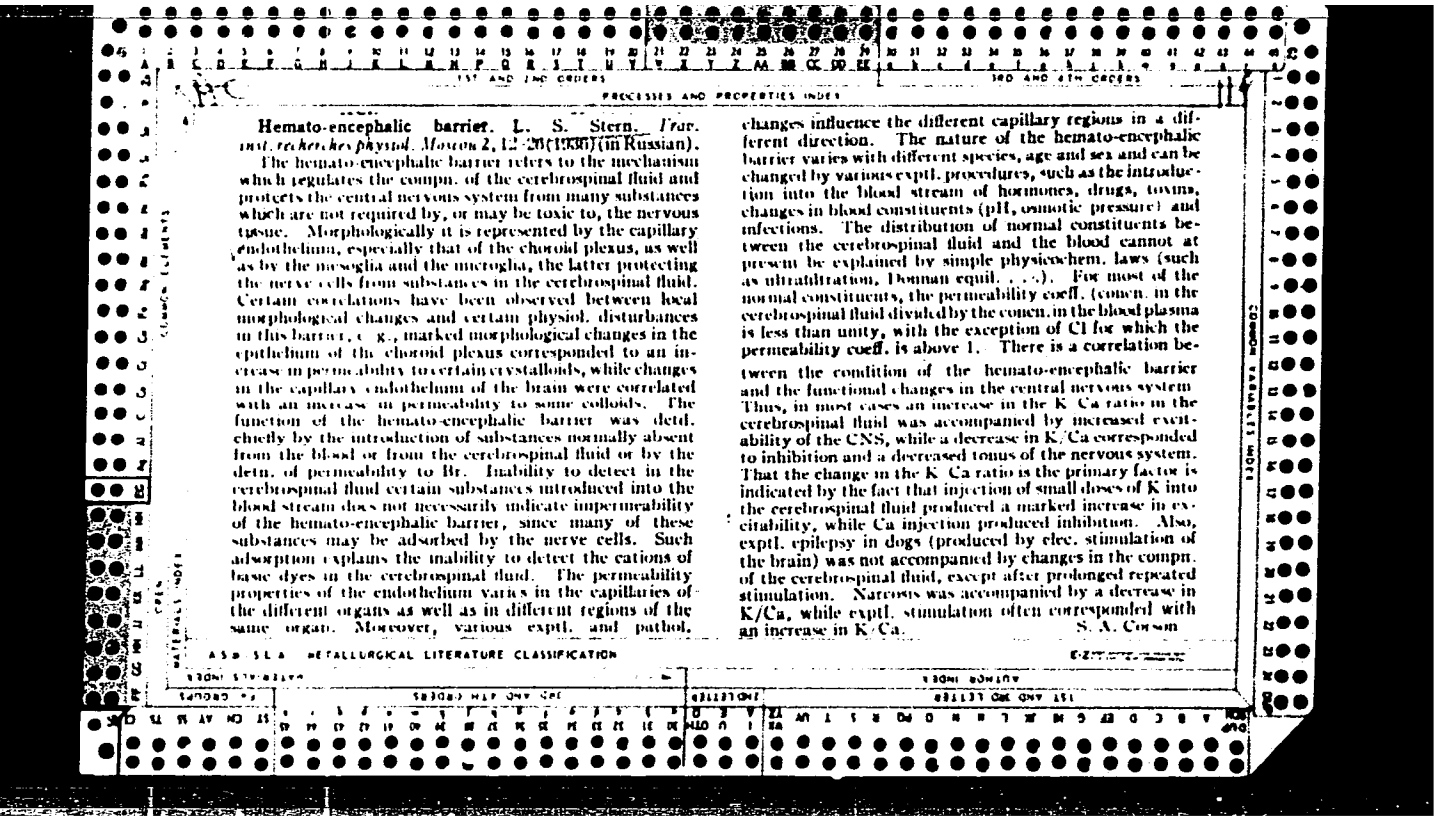
PROCESSES AND PROPERTIES INDEX

112

Relations between the blood-brain barrier, composition of cerebrospinal fluid and functional state of the central nervous system. L. S. Shtern. *Bull. biol. méd. expl. U. R. S. S.* 1, 412–19(1936); *Physiol. Abstracts* 22, 971–2. —A brief review of the work of the author and his colleagues. The cerebrospinal fluid is considered to play a dominant role in humoral coördination of the activities of different parts of the central nervous system. M. W. B.

The influence of faradic stimulation of the brain upon the excitability of a muscle devoid of nerve connections with the centers. O. V. Vershilova and A. N. Magnitskii. *Bull. biol. méd. expl. U. R. S. S.* 1, 424–8(1936); *Physiol. Abstracts* 22, 940.—Faradic stimulation of the brain in cats induced a change of chronaxie in the denervated gastrocnemius muscle, while the rheobase is hardly affected. It is concluded that faradic stimulation leads to the formation of those substances which pass into the blood stream and influence the functional lability of the muscle. M. W. B.

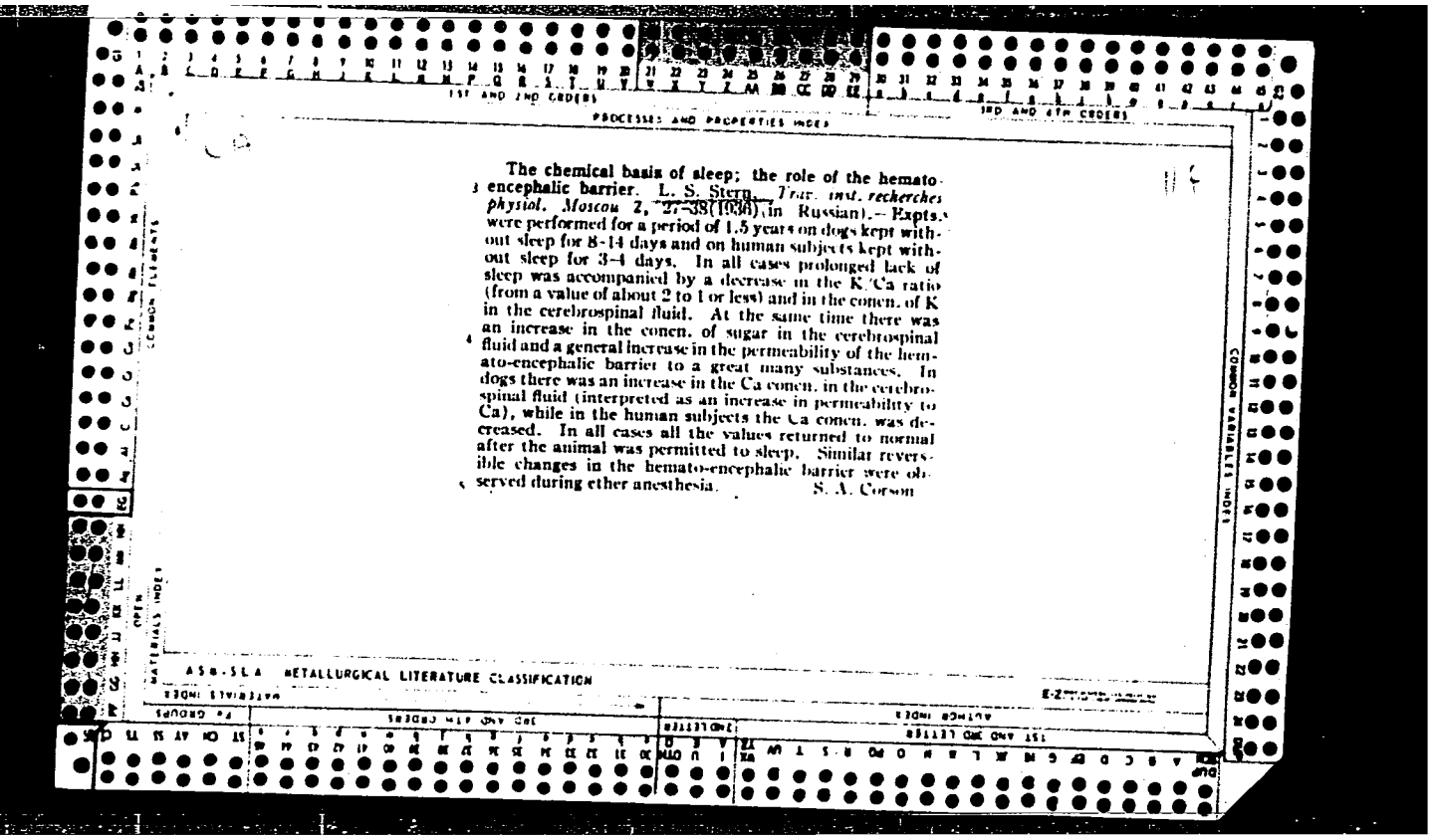
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Hemato-encephalic barrier. L. S. Stern. *Trav. inst. recherches physiol. Moscou* 2, 12–20 (1936) (in Russian).

The hemato-encephalic barrier refers to the mechanism which regulates the compn. of the cerebrospinal fluid and protects the central nervous system from many substances which are not required by, or may be toxic to, the nervous tissue. Morphologically it is represented by the capillary endothelium, especially that of the choroid plexus, as well as by the neuroglia and the microglia, the latter protecting the nerve cells from substances in the cerebrospinal fluid. Certain correlations have been observed between local morphological changes and certain physiol. disturbances in this barrier, e. g., marked morphological changes in the epithelium of the choroid plexus corresponded to an increase in permeability to certain crystalloids, while changes in the capillary endothelium of the brain were correlated with an increase in permeability to some colloids. The function of the hemato-encephalic barrier was detd. chiefly by the introduction of substances normally absent from the blood or from the cerebrospinal fluid or by the detn. of permeability to Br. Inability to detect in the cerebrospinal fluid certain substances introduced into the blood stream does not necessarily indicate impermeability of the hemato-encephalic barrier, since many of these substances may be adsorbed by the nerve cells. Such adsorption explains the inability to detect the cations of basic dyes in the cerebrospinal fluid. The permeability properties of the endothelium varies in the capillaries of the different organs as well as in different regions of the same organ. Moreover, various exptl. and pathol. changes influence the different capillary regions in a different direction. The nature of the hemato-encephalic barrier varies with different species, age and sex and can be changed by various exptl. procedures, such as the introduction into the blood stream of hormones, drugs, toxins, changes in blood constituents (pH, osmotic pressure) and infections. The distribution of normal constituents between the cerebrospinal fluid and the blood cannot at present be explained by simple physicochem. laws (such as ultrafiltration, Donnan equil., etc.). For most of the normal constituents, the permeability coeff. (concn. in the cerebrospinal fluid divided by the concn. in the blood plasma is less than unity, with the exception of Cl for which the permeability coeff. is above 1. There is a correlation between the condition of the hemato-encephalic barrier and the functional changes in the central nervous system. Thus, in most cases an increase in the K/Ca ratio in the cerebrospinal fluid was accompanied by increased excitability of the CNS, while a decrease in K/Ca corresponded to inhibition and a decreased tonus of the nervous system. That the change in the K/Ca ratio is the primary factor is indicated by the fact that injection of small doses of K into the cerebrospinal fluid produced a marked increase in excitability, while Ca injection produced inhibition. Also, exptl. epilepsy in dogs (produced by elec. stimulation of the brain) was not accompanied by changes in the compn. of the cerebrospinal fluid, except after prolonged repeated stimulation. Narcosis was accompanied by a decrease in K/Ca, while exptl. stimulation often corresponded with an increase in K/Ca.

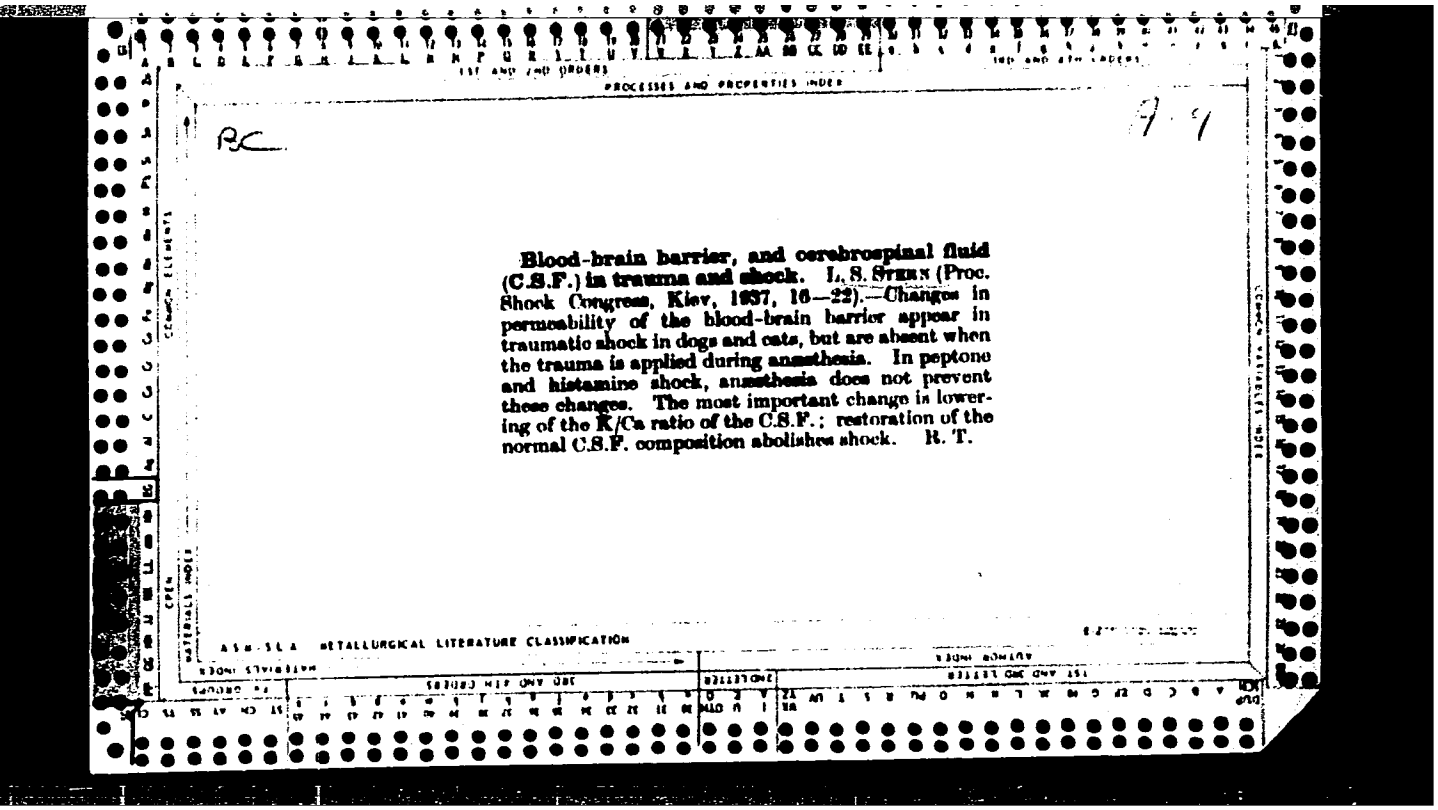
S. A. Corson



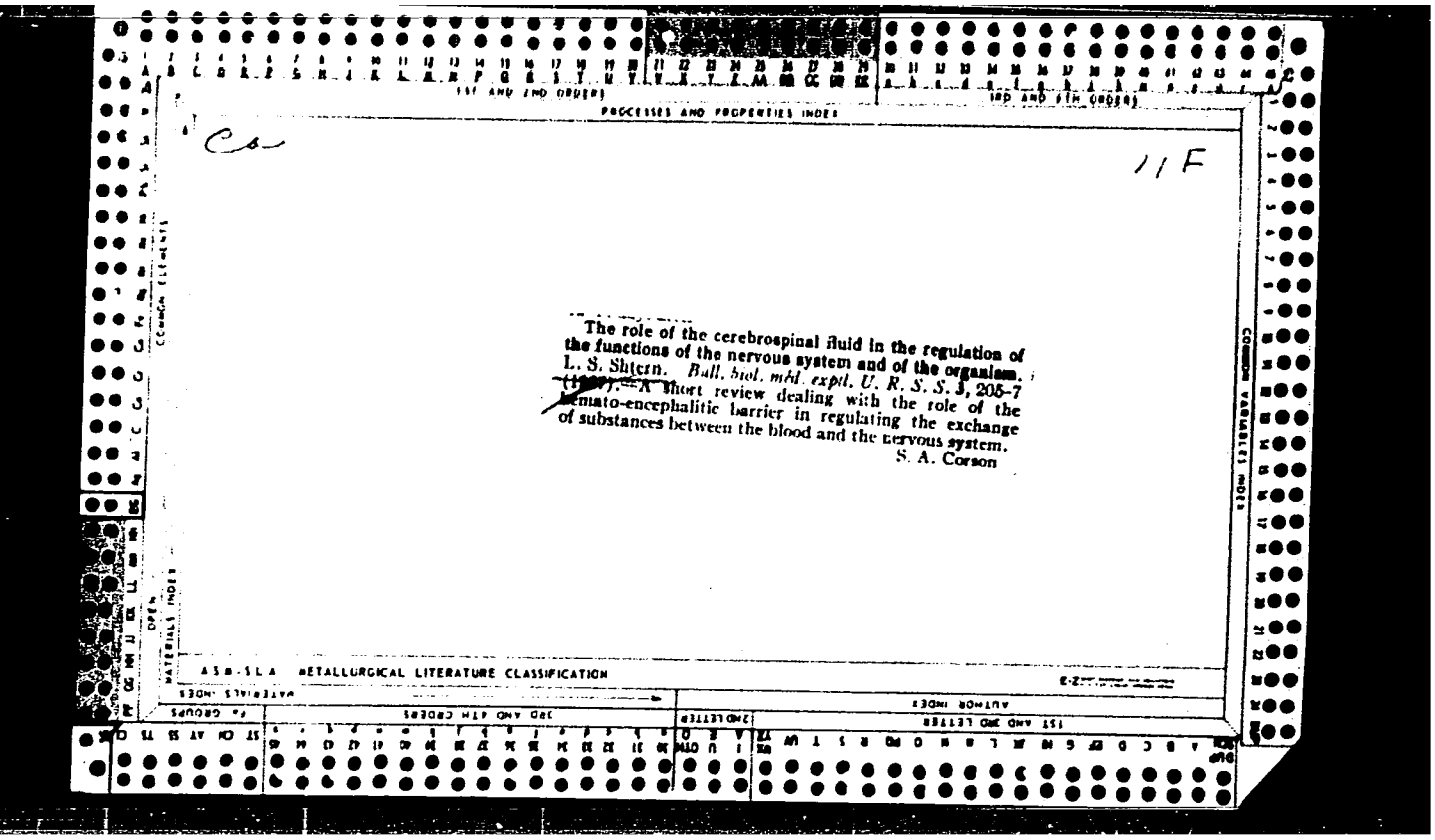
PROCESSES AND PROPERTIES INDEX

The chemical basis of sleep; the role of the hemato-encephalic barrier. L. S. Stern. *Trav. inst. recherches physiol. Moscou* 2, 27-38(1936)(in Russian).—Expts. were performed for a period of 1.5 years on dogs kept without sleep for 8-14 days and on human subjects kept without sleep for 3-4 days. In all cases prolonged lack of sleep was accompanied by a decrease in the K/Ca ratio (from a value of about 2 to 1 or less) and in the concn. of K in the cerebrospinal fluid. At the same time there was an increase in the concn. of sugar in the cerebrospinal fluid and a general increase in the permeability of the hemato-encephalic barrier to a great many substances. In dogs there was an increase in the Ca concn. in the cerebrospinal fluid (interpreted as an increase in permeability to Ca), while in the human subjects the Ca concn. was decreased. In all cases all the values returned to normal after the animal was permitted to sleep. Similar reversible changes in the hemato-encephalic barrier were observed during ether anesthesia. S. A. Corson

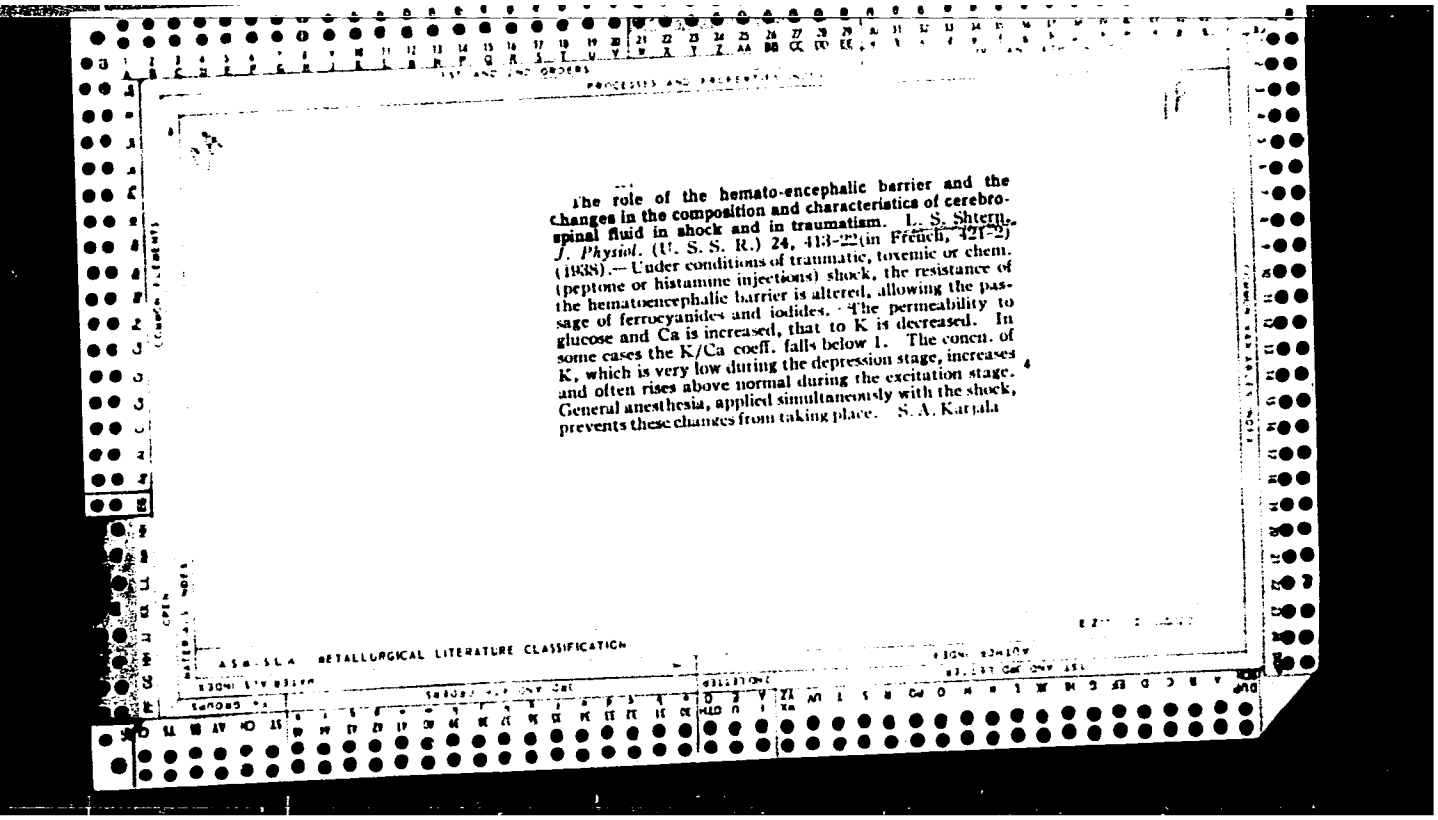
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



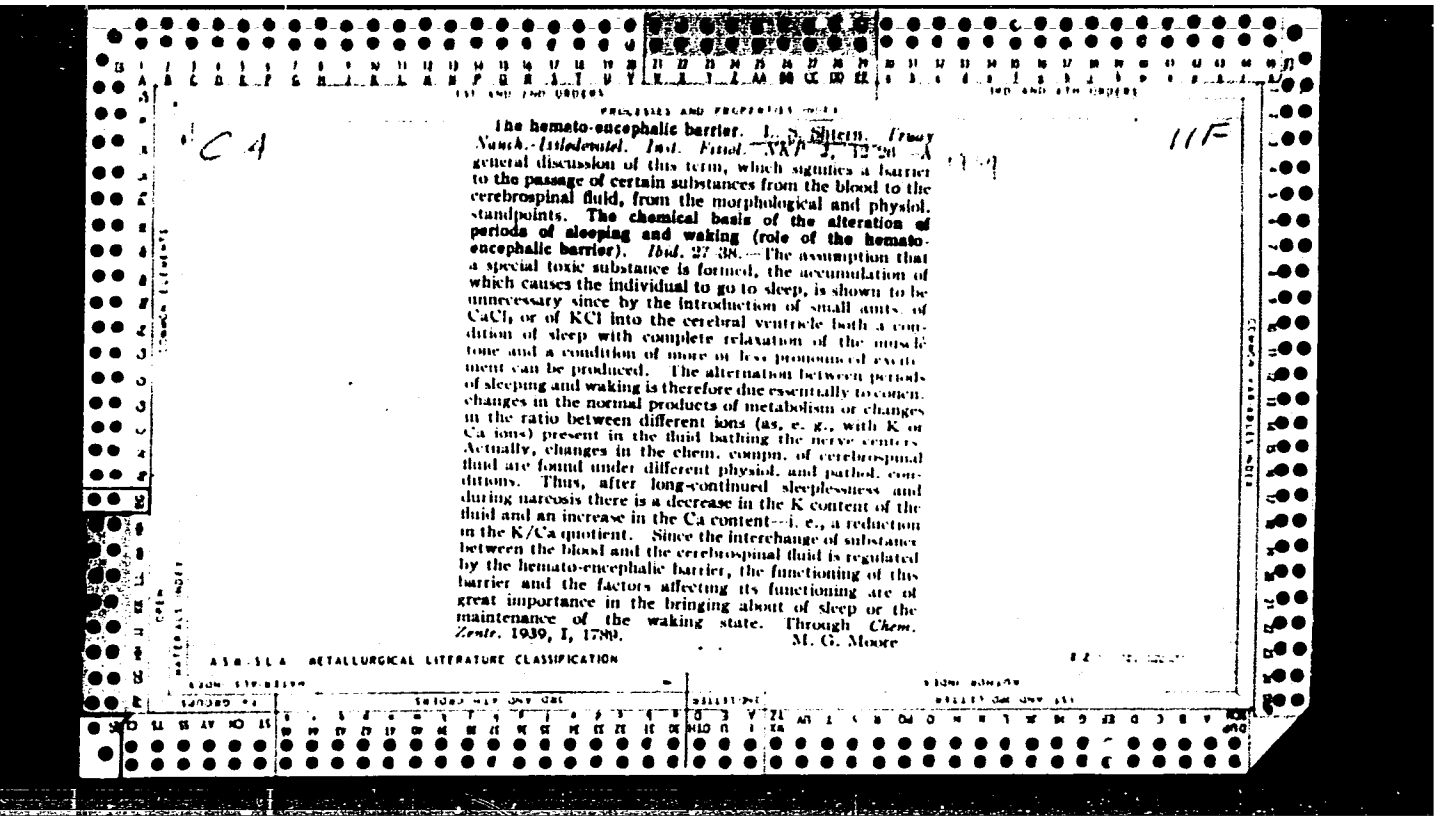
Blood-brain barrier, and cerebrospinal fluid (C.S.F.) in trauma and shock. L. S. Stern (Proc. Shock Congress, Kiev, 1937, 16—22).—Changes in permeability of the blood-brain barrier appear in traumatic shock in dogs and cats, but are absent when the trauma is applied during anæsthesia. In peptone and histamine shock, anæsthesia does not prevent these changes. The most important change is lowering of the K/Ca ratio of the C.S.F.; restoration of the normal C.S.F. composition abolishes shock. R. T.



The role of the cerebrospinal fluid in the regulation of the functions of the nervous system and of the organism. L. S. Shtern. *Bull. biol. méd. expl. U. R. S. S.* 3, 205-7 (1937). A short review dealing with the role of the hemato-encephalitic barrier in regulating the exchange of substances between the blood and the nervous system.
S. A. Corson



The role of the hemato-encephalic barrier and the changes in the composition and characteristics of cerebro-spinal fluid in shock and in traumatism. L. S. Shtern. *J. Physiol.* (U. S. S. R.) 24, 413–22 (in French, 421–2) (1938).— Under conditions of traumatic, toxemic or chem. (peptone or histamine injections) shock, the resistance of the hematoencephalic barrier is altered, allowing the passage of ferrocyanides and iodides. The permeability to glucose and Ca is increased, that to K is decreased. In some cases the K/Ca coeff. falls below 1. The concn. of K, which is very low during the depression stage, increases and often rises above normal during the excitation stage. General anesthesia, applied simultaneously with the shock, prevents these changes from taking place. S. A. Karpala



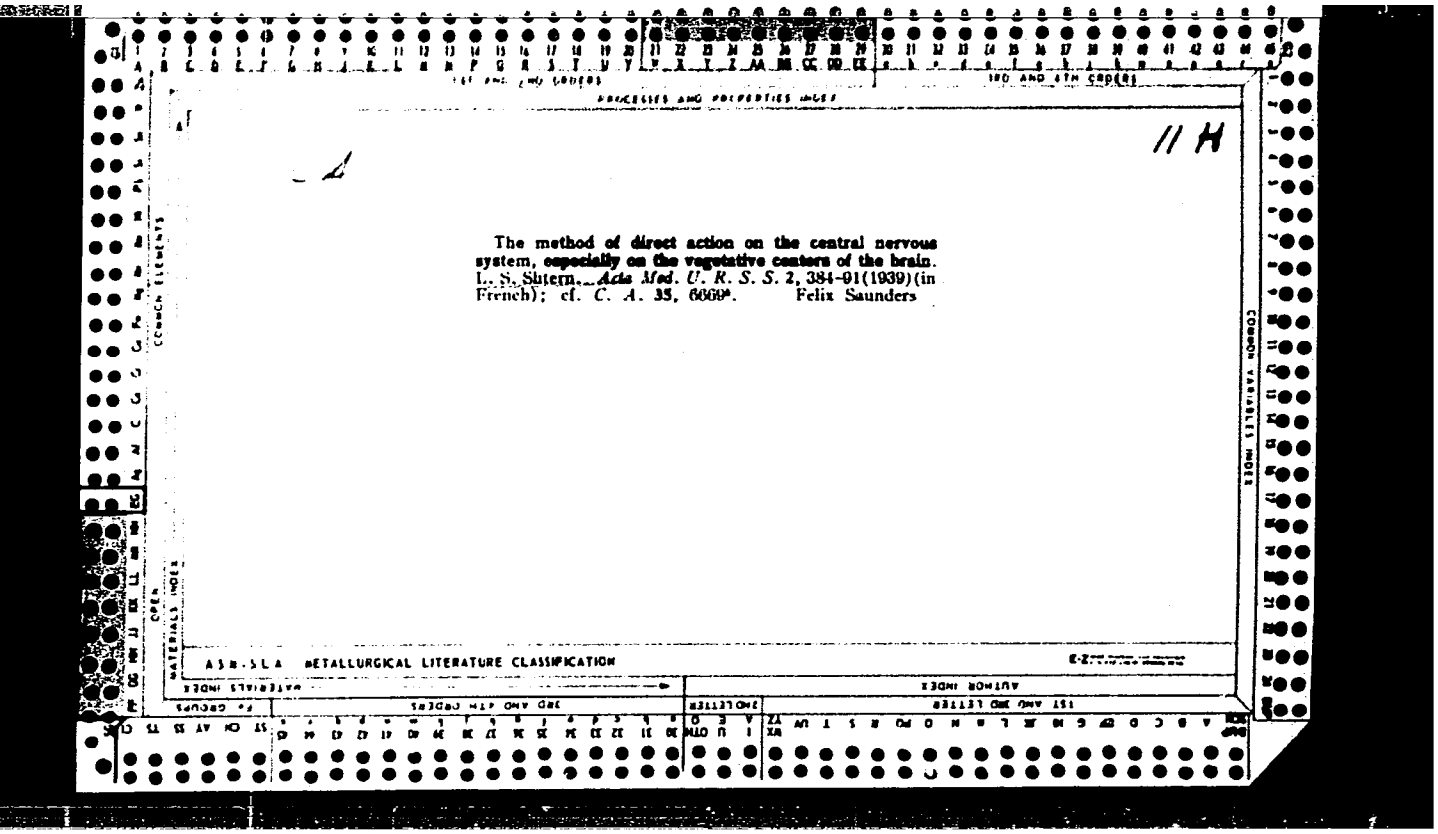
C 4

11F

The hemato-encephalic barrier. L. S. Stern. *Trans. Naturk.-Litteratur. Inst. Finsk.* XX/1 2, 12 pp. A general discussion of this term, which signifies a barrier to the passage of certain substances from the blood to the cerebrospinal fluid, from the morphological and physiol. standpoints. **The chemical basis of the alteration of periods of sleeping and waking (role of the hemato-encephalic barrier).** *Ibid.* 27-38.—The assumption that a special toxic substance is formed, the accumulation of which causes the individual to go to sleep, is shown to be unnecessary since by the introduction of small amts. of $CaCl_2$ or of KCl into the cerebral ventricle both a condition of sleep with complete relaxation of the muscle tone and a condition of more or less pronounced excitement can be produced. The alternation between periods of sleeping and waking is therefore due essentially to concen. changes in the normal products of metabolism or changes in the ratio between different ions (as, e. g., with K or Ca ions) present in the fluid bathing the nerve centers. Actually, changes in the chem. compn. of cerebrospinal fluid are found under different physiol. and pathol. conditions. Thus, after long-continued sleeplessness and during narcosis there is a decrease in the K content of the fluid and an increase in the Ca content—i. e., a reduction in the K/Ca quotient. Since the interchange of substances between the blood and the cerebrospinal fluid is regulated by the hemato-encephalic barrier, the functioning of this barrier and the factors affecting its functioning are of great importance in the bringing about of sleep or the maintenance of the waking state. Through *Chem. Zentr.* 1939, I, 1780.

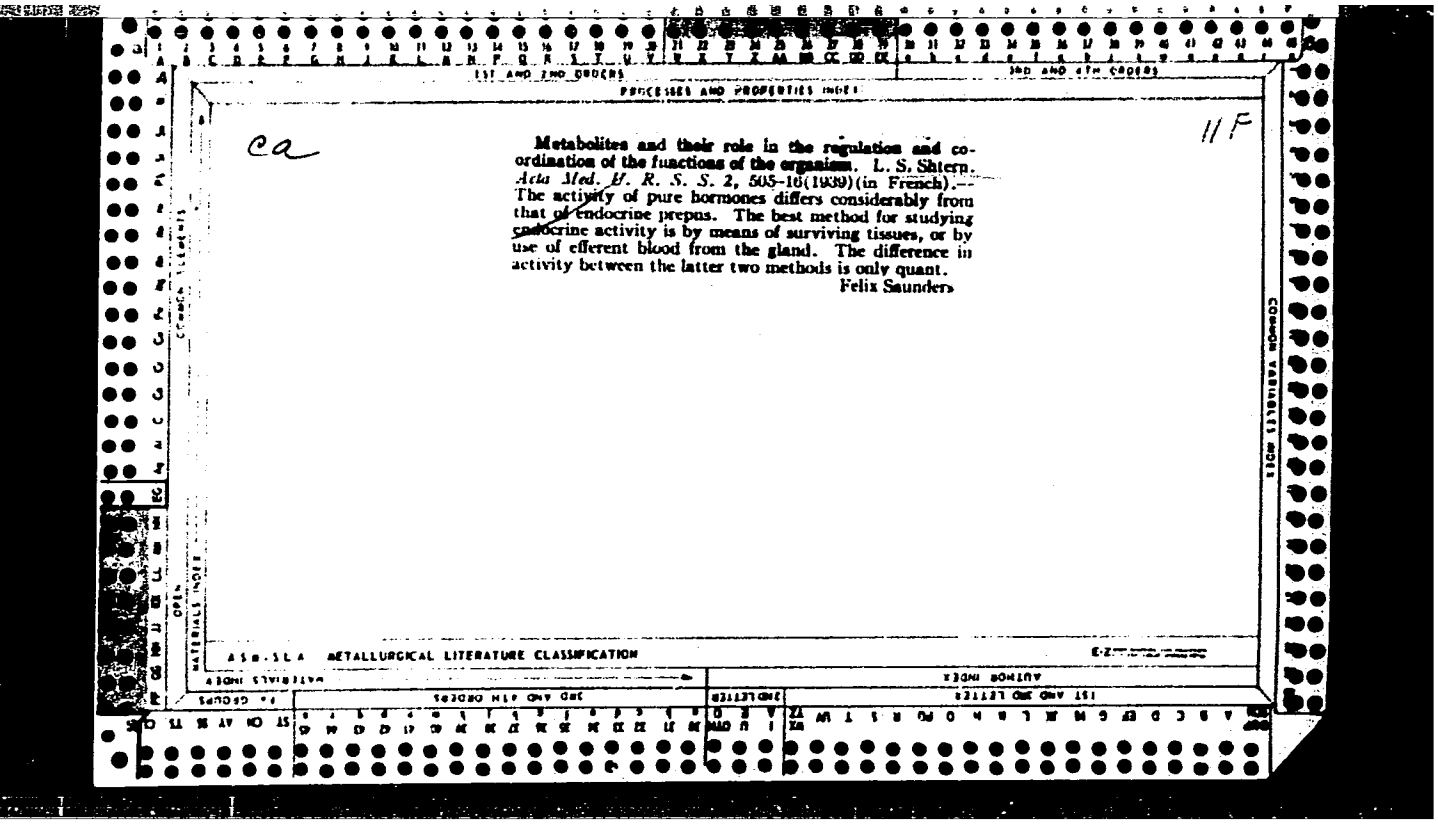
M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



11 H

The method of direct action on the central nervous system, especially on the vegetative centers of the brain. L. S. Stern. *Acta Med. U. R. S. S.* 2, 384-91(1939)(in French); cf. *C. A.* 35, 6669⁹. Felix Saunders

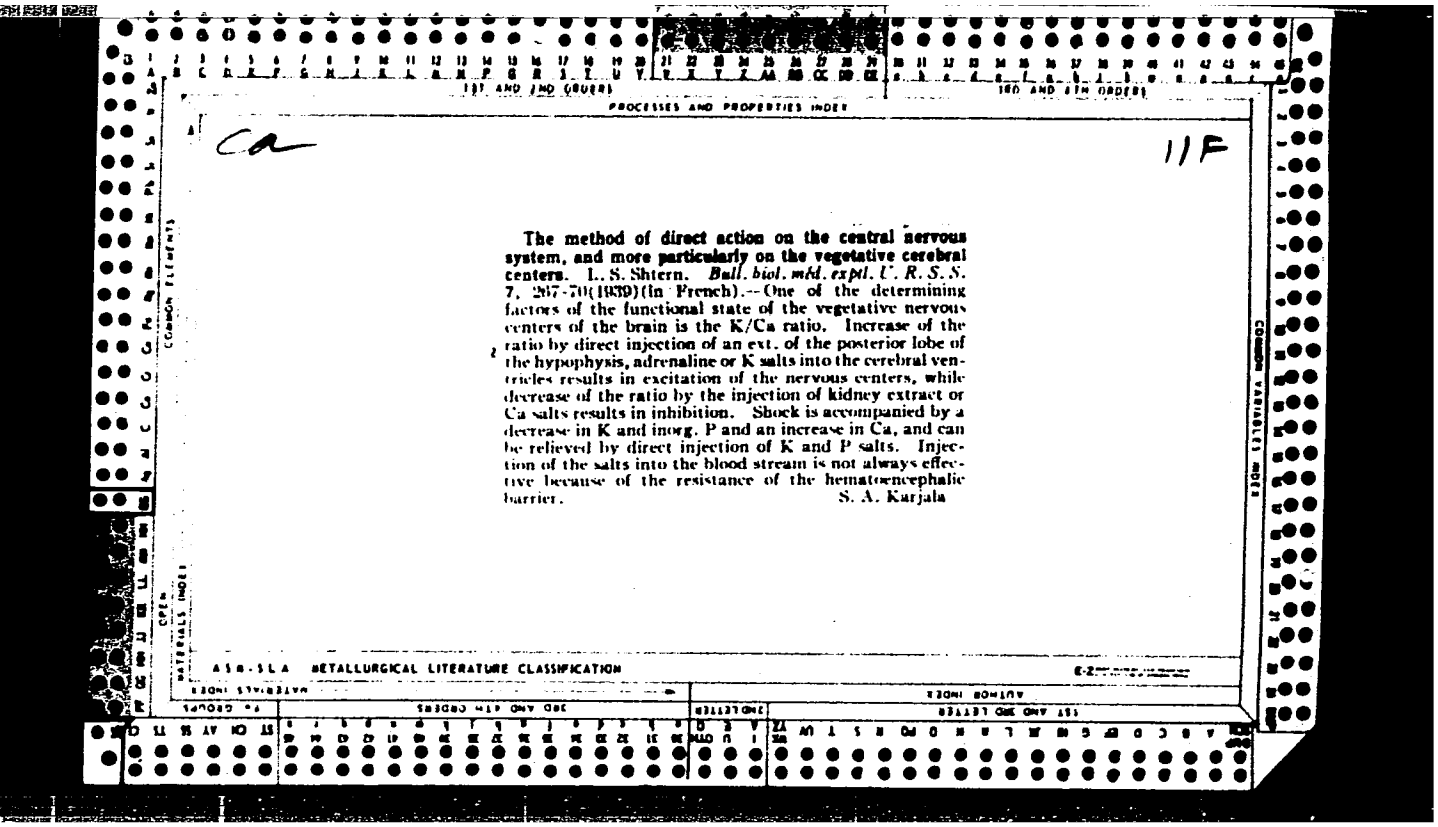


ca

11F

Metabolites and their role in the regulation and coordination of the functions of the organism. L. S. Shtern. *Acta Med. U. R. S. S.* 2, 505-16(1939)(in French).--The activity of pure hormones differs considerably from that of endocrine preps. The best method for studying endocrine activity is by means of surviving tissues, or by use of efferent blood from the gland. The difference in activity between the latter two methods is only quant.

Felix Saunders

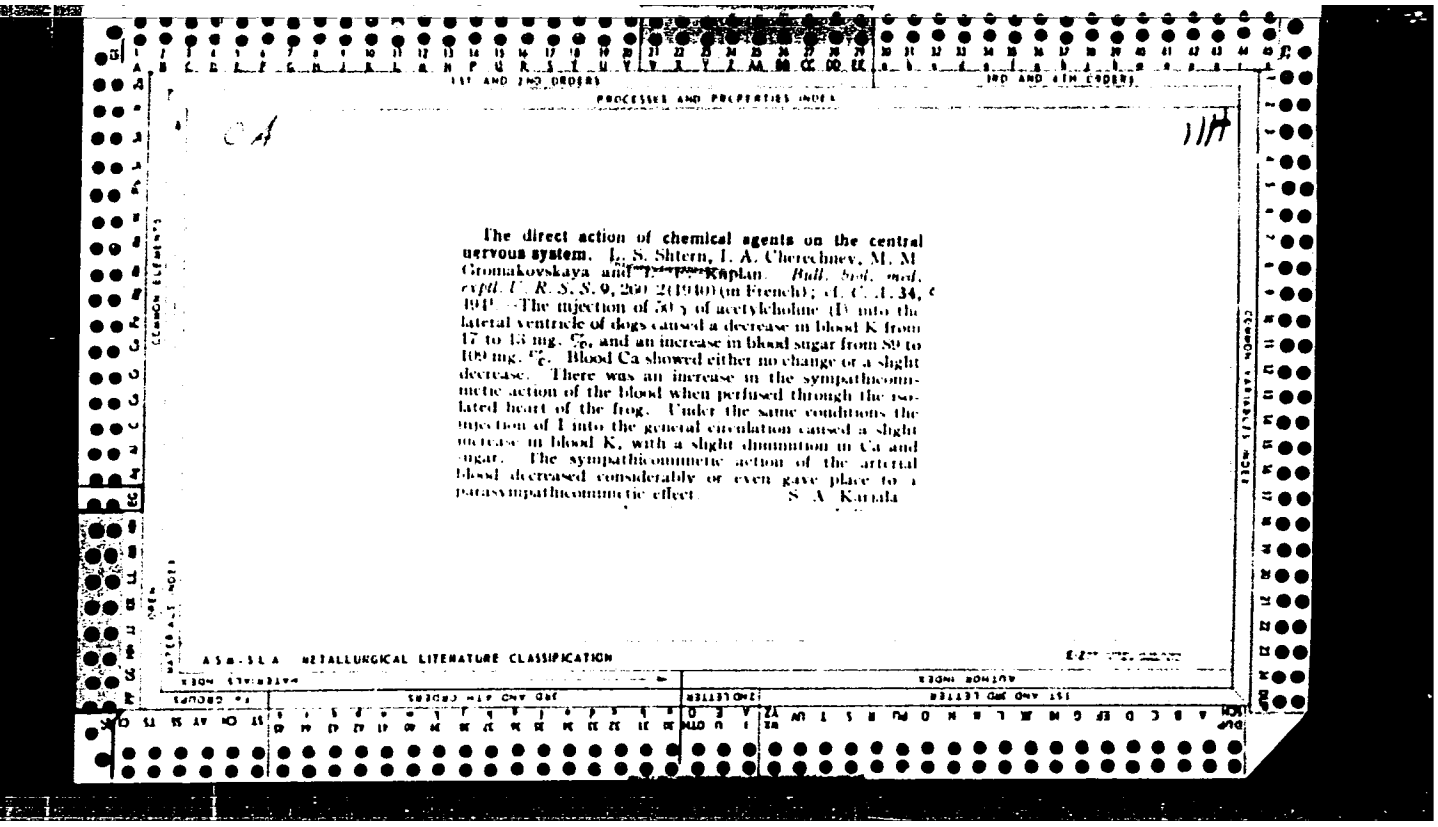


Ca

11F

The method of direct action on the central nervous system, and more particularly on the vegetative cerebral centers. L. S. Shtern. *Bull. biol. méd. expl. U. R. S. S.* 7, 267-70(1939)(in French).--One of the determining factors of the functional state of the vegetative nervous centers of the brain is the K/Ca ratio. Increase of the ratio by direct injection of an ext. of the posterior lobe of the hypophysis, adrenaline or K salts into the cerebral ventricles results in excitation of the nervous centers, while decrease of the ratio by the injection of kidney extract or Ca salts results in inhibition. Shock is accompanied by a decrease in K and inorg. P and an increase in Ca, and can be relieved by direct injection of K and P salts. Injection of the salts into the blood stream is not always effective because of the resistance of the hematoencephalic barrier.

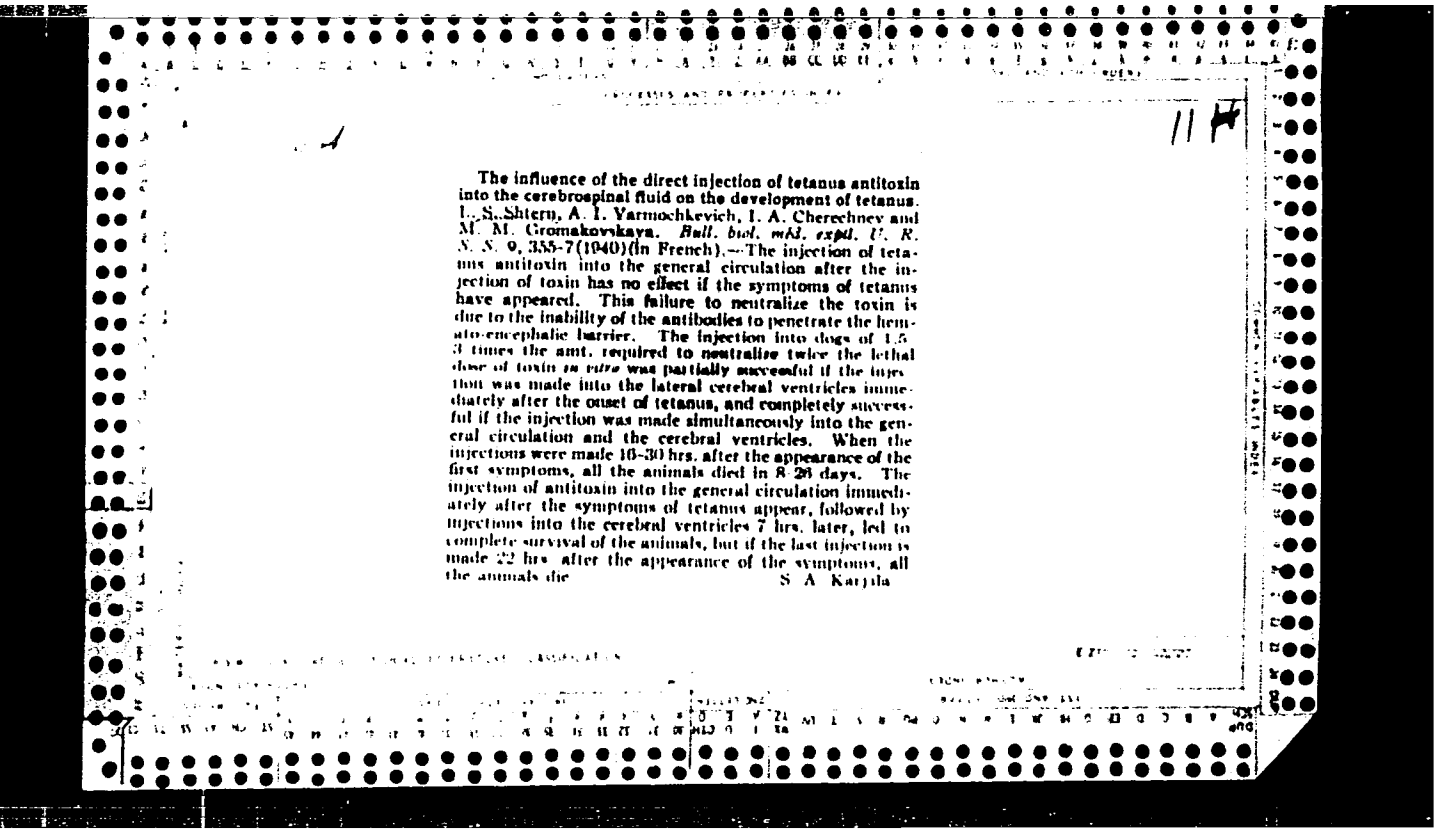
S. A. Kurjala



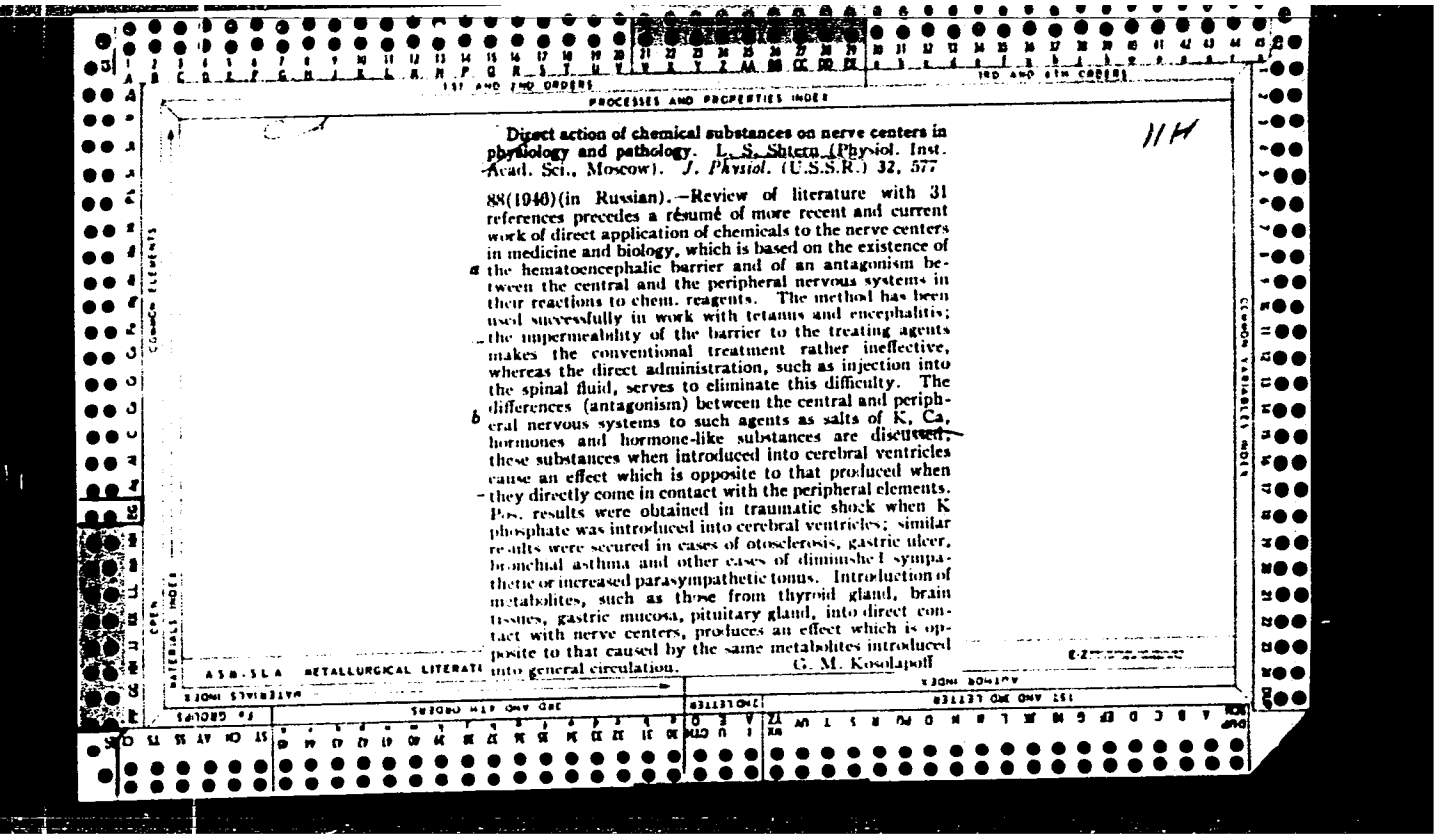
PROCESSES AND PROPERTIES INDEX

The direct action of chemical agents on the central nervous system. L. S. Shtern, I. A. Cherechnev, M. M. Gromakovskaya and [illegible] Kaplan. *Bull. Soc. med. exptl. U. R. S. S.* 9, 200-2 (1930) (in French); cf. *C. A.* 34, 4191.—The injection of 50 γ of acetylcholine (I) into the lateral ventricle of dogs caused a decrease in blood K from 17 to 15 mg. %, and an increase in blood sugar from 89 to 109 mg. %. Blood Ca showed either no change or a slight decrease. There was an increase in the sympathicommimetic action of the blood when perfused through the isolated heart of the frog. Under the same conditions the injection of I into the general circulation caused a slight increase in blood K, with a slight diminution in Ca and sugar. The sympathicommimetic action of the arterial blood decreased considerably or even gave place to a parasympathicommimetic effect. S. A. Kanada

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The influence of the direct injection of tetanus antitoxin into the cerebrospinal fluid on the development of tetanus. L. S. Shtern, A. I. Yarmochkevich, I. A. Cherechnev and M. M. Gromakovskaya. *Bull. biol. méd. expl. U. R. S. S.* 9, 355-7(1940)(In French).—The injection of tetanus antitoxin into the general circulation after the injection of toxin has no effect if the symptoms of tetanus have appeared. This failure to neutralize the toxin is due to the inability of the antibodies to penetrate the hemato-encephalic barrier. The injection into dogs of 1.5-3 times the amt. required to neutralize twice the lethal dose of toxin *in vitro* was partially successful if the injection was made into the lateral cerebral ventricles immediately after the onset of tetanus, and completely successful if the injection was made simultaneously into the general circulation and the cerebral ventricles. When the injections were made 16-30 hrs. after the appearance of the first symptoms, all the animals died in 8-26 days. The injection of antitoxin into the general circulation immediately after the symptoms of tetanus appear, followed by injections into the cerebral ventricles 7 hrs. later, led to complete survival of the animals, but if the last injection is made 22 hrs. after the appearance of the symptoms, all the animals die. S. A. Karjala



PROCESSES AND PROPERTIES INDEX

Direct action of chemical substances on nerve centers in physiology and pathology. L. S. Shtern (Physiol. Inst. Acad. Sci., Moscow). *J. Physiol.* (U.S.S.R.) **32**, 577-88(1940)(in Russian).—Review of literature with 31 references precedes a résumé of more recent and current work of direct application of chemicals to the nerve centers in medicine and biology, which is based on the existence of the hematoencephalic barrier and of an antagonism between the central and the peripheral nervous systems in their reactions to chem. reagents. The method has been used successfully in work with tetanus and encephalitis; the impermeability of the barrier to the treating agents makes the conventional treatment rather ineffective, whereas the direct administration, such as injection into the spinal fluid, serves to eliminate this difficulty. The differences (antagonism) between the central and peripheral nervous systems to such agents as salts of K, Ca, hormones and hormone-like substances are discussed; these substances when introduced into cerebral ventricles cause an effect which is opposite to that produced when they directly come in contact with the peripheral elements. Pos. results were obtained in traumatic shock when K phosphate was introduced into cerebral ventricles; similar results were secured in cases of otosclerosis, gastric ulcer, bronchial asthma and other cases of diminished sympathetic or increased parasympathetic tonus. Introduction of metabolites, such as those from thyroid gland, brain tissues, gastric mucosa, pituitary gland, into direct contact with nerve centers, produces an effect which is opposite to that caused by the same metabolites introduced into general circulation.

G. M. Kosolapoff

USSR/Medicine - Meninges, Tuberculosis May 1947
Medicine - Streptomycin

"Preliminary Data on Tuberculous Meningitis Treatment With Streptomycin," L. S. Stern, U.A. Rosin, D. S. Futer, E. V. Prokhorovich, 4 pp

"Byul Eksp Biol i Med" Vol XXIII, No 6

General discussion of clinical observations. It is concluded that longer periods of observation are necessary.

1477

USSR/Medicine -- Nervous System, Effect of Drugs on Jul 48
Medicine -- Shock, Therapy

"Direct Chemical Action on Nerve Centers," Acad L. S. Shtern, 10 pp

"Vest Ak Nauk SSSR" No 7

Author developed direct method of chemical stimulation of nerve centers in course of much research on cerebrospinal treatments. Describes administration of mixture of potassium mono- and diphosphates, calcium salts and Vitamin B_1, and successful results obtained from this treatment in shock and other cases.

10/49T76

T-13

USSR/Human and Animal Physiology - Effects of Physical Factors.

Abs Jour : Ref Zhur - Biol., No 7, 1957, 32311

Author : Stern, L.S., Rapoport, S.Y., Gromakovakaya, M.M., Zubkova, S.R.

Inst :
Title : Influence of X-Ray Irradiation on the Permeability of Histohematic Barriers.

Orig Pub : Biofizika, 1957, 2, No 187-196.

Abstract : By introducing P32 and I^{131} into the blood, the change of the permeability of the hemoencephalic barrier (HEB) and of the hemoencephalic barriers of the liver and muscles was studied in rats after exposure (E) to 800 r. The radioactivity of the blood decreased 47% through the 5 minutes after the introduction of P32 into the heart cavity, in the following 10 minutes - 25%, and beginning with 30 minutes after the introduction - 1-2% in the course of each 15 minutes. Isotopes were introduced

Card 1/3

SHTERN, L.S.

Specificity of hydrogen acceptors in the respiratory processes of animal tissues and the catalase system [with summary in English] Biokhimiia 22 no.1/2:421-429 Ja-F '57. (MLRA 10:7)

1. Institut biofiziki Akademii nauk SSSR, Moskva.
(METABOLISM, TISSUE,
specificity of hydrogen-acceptor in resp. & catalase system (Rus))
(CATALASE,
same)

SHTERN, L.S. (Moskva)

Present status of the problem of a hematoencephalic barrier.
Usp.sovr.biol. 45 no.3:328-348 My-Je '58 (MIRA 11:8)
(BLOOD,
blood-CSF passage of substances, review (Rus))
(HEMATO-ENCEPHALIC BARRIER,
review (Rus))

17(1), 21(3) SOV/20-126-3-67/69

AUTHORS: Shtern, L. S., Academician, Rapoport, S. Ya., Gromakovskaya, M. M.

TITLE: The Importance of the Nervous System for the Change of Permeability of the Histo-hematic Barriers Under the Effect of Irradiation (Rol' nervnoy sistemy v izmenenii pronitsayemosti gisto-gematicheskikh bar'yerov pri obluchenii)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 3, pp 699 - 702 (USSR)

ABSTRACT: In previous papers by the authors (Refs 1,2), it was ascertained that a single total irradiation of animals with a lethal dosis of X-rays leads to early changes as mentioned in the title. A previous introduction of novocaine, atropine or morphine prevents these changes of the barriers mentioned in the title (HHB). The present investigation clarifies the problem of whether the protective effect of the neurotropic substances is maintained in case of their introduction a f t e r the irradiation; further - what effect such an introduction b e f o r e and a f t e r the irradiation has on the duration of life of the animals exposed to rays. The

Card 1/ 3

effect on the HHB- permeability. As table 1 shows, the nervous mechanism play an important part in the rise and further development of permeability variations of the HHB produced by irradiation (in agreement with Refs 3-13). As at a screening of the belly region no HHB-permeability changes due to irradiation take place, tests were carried out to examine whether these changes are caused by disturbances of the organs in the belly due to irradiation. The receivers of the belly were isolated by the introduction of 1.0 ml of anaesthetics (Ref 14) 17-18 hours after the irradiation. From the results (Table 2) it can be seen that the irradiation of the animals after the isolation of the receivers does not bring about an increase in the HHB-permeability. Effect of the introduction of neurotropic substances on the survival of animals exposed to rays. These substances were introduced 10-15 min before, or 5 min after, the irradiation (novocaine - 20 mg per animal, atropine - 1 mg, and morphine - 10 mg per animal). Table 3 shows that only the morphine has a distinct influence on the survival of animals exposed to rays. This protective effect is

attributed to a tissue hypoxy brought about by an inhibition of the breathing conter. Such mechanism presupposes its interference already during the irradiation. This is confirmed by a saving of the animals only if the morphine is introduced b e f o r e the irradiation. Both the results of the authors and the publication references lead to the conclusion that the protective effect of novocaine is brought about by the isolation of the receiving portion of the reflexes which are produced by irradiation due to a change in the chemism of organs and tissues. There are 3 tables and 22 references, 12 of which are Soviet.

SUBMITTED: March 18, 1959

SHTERN, L.S.

The role and significance of histohematic barriers in the animal organism. Izv. AN SSSR. Ser. biol. no.3:338-345 My-Je '60.
(MIRA 13:7)

1. Institute of Biological Physics, Academy of Sciences of the U.S.S.R., Moscow.
(CAPILLARIES--PERMEABILITY)

SHTERN, L.S., akad., otv.red.; RAPOPORT, S.Ya., doktor med.nauk, red.; ROSIN, Ya.A., doktor med.nauk, zam. otv. red.; UTEVSKAYA, L.B., kand. biol.nauk, red.; TRINCHER, K.S., red. izd-va; VOLKOVA, V.V., tekhn.red.

[Histohematic barriers; transactions of the conference] Gisto-gematicheskie bar'ery; trudy soveshchaniia. Moskva, Izd-vo Akad.nauk SSSR, 1961. 406 p. (MIRA 14:12)

1. Konferentsiya po voprosam neposredstvennogo vozdeystviya na nervnyye tsentry. 3d, Moscow, 1960. 2. Laboratoriya fiziologii pri Institute biologicheskoy fiziki AN SSSR (for Utevskaya).
(CAPILLARIES—PERMEABILITY)

SHTERN, L.S., akademik, otv. red.; RAPOPORT, S.Ya., doktor med. nauk, red.; ROSIN, Ya.A., doktor med. nauk, prof., red.; TRINCHER, K.S., red. izd-va; POLENOVA, T.P., tekhn. red.

[Histohematic barriers and ionizing radiation] Gisto-gematicheskie bar'ery i ioniziruiushchaia radiatsiia; sbornik rabot laboratorii fiziologii. Moskva, Izd-vo Akad. nauk SSSR, 1963. 215 p. (MIRA 16:5)

1. Akademiya nauk SSSR. Institut biologicheskoy fiziki.
(Radiation—Physiological effect)
(Histology) (Hematology)

SHTERN, L.S., akademik, otv. red.; RAPOPORT, S.Ya., doktor med. nauk, red.; ROSIN, Ya.A., doktor med. nauk, prof., red.; LANDAU-TYLKINA, S.P., red.

[Problems of histohematic barriers; transactions] Problemy gisto-gematicheskikh bar'erov; trudy. Moskva, Nauka, 1965. 330 p. (MIRA 18:10)

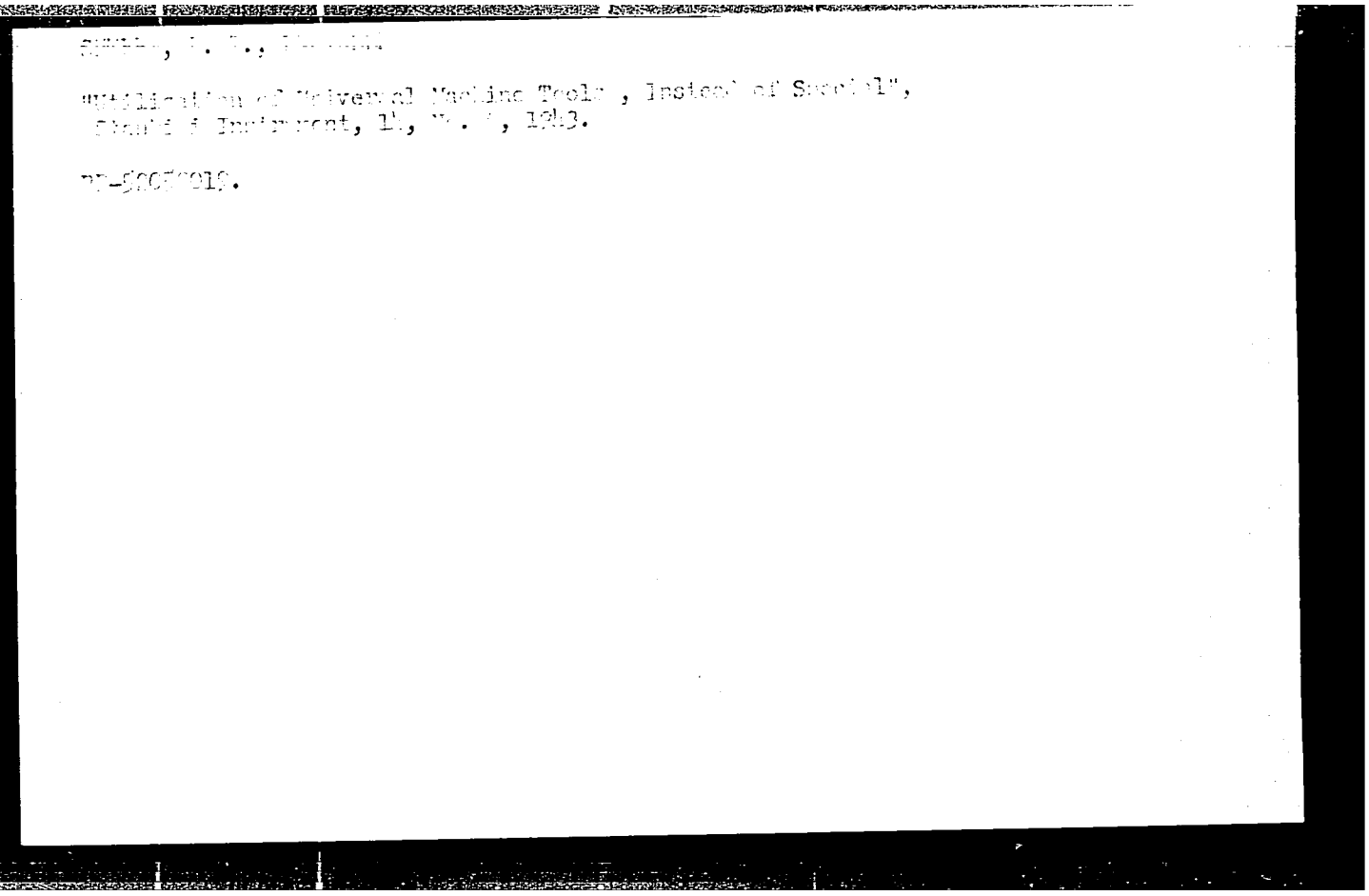
1. Soveshchaniye po probleme gisto-gematicheskikh bar'yerov. 2d, 1963.

[redacted], I. T., [redacted]

Kansas Ordnance Plant (1943)

"[redacted]", Electronics & Instrument, 2, No. 6, 1943.

RP-[redacted].



[illegible], J. F., [illegible]

"Utilization of Universal Machine Tools , Instead of Special", Shop Improvement, [illegible], [illegible], 1943.

[illegible]-S[illegible]019.

SHTERN, L. T.

Sep 1947

USSR/Mechanics
Welding - Methods
Lathes

"Welding the Main Parts of a Lathe," L. T. Shtern, 9 pp

"Vestnik Mashinostroyeniya" Vol XXVII, No 9

Author claims that it is entirely possible to use welded turning lathes in series, with a saving of up to 50 percent of metal, and as a result of the saving of metal there is also a great saving in the cost of a lathe. On the other hand a welded thin-walled mount for lathes is not as steady, tough and durable as the cast mount, nor does it have the

23T69

USSR/Mechanics (Contd)
Welding - Methods
Lathes

Sep 1947

resistance to vibration. The author presents diagrams, tables and graphs to support his statements.

23T69

SHTERN, L. T.

USSR/ Miscellaneous - Economy

Card 1/1 : Pub. 103 - 1/29

Authors : Shtern, L. T.

Title : Reduction in volume of metal for construction of lathes

Periodical : Stan. i instr. 9, 1-6, Sep 1954

Abstract : The experiences of various machine construction plants, in their drive to decrease the volume of metal consumed for the manufacture of ordinary lathes, are described. Several suggestion for increasing the service life of machines and machine parts are listed. Tables; drawings; illustrations.

Institution : ...

Submitted : ...

SHTERN, L.T.

Technological equipment in the construction of lathes.
Stan. i instr. 26 no.4:5-9 Ap '55.
(MLRA 8:6)

(Machine tool industry) (Lathes)

SHTERN, L.T.

Design of lathe attachments for production. Stan i instr. 26 no.5:6-10 My '55. (MLRA 8:8)
(Lathes)

Increasing Labor Productivity in Machine Building (Voprosy povysheniya proiavoditel'nosti truda v mashinostroenii) Gosudarstvennoye nauch-tekh. izdat. mashinostroitel'. literatury, Moscow, 1957. 511 pp.
(Table of Contents authors below)

This collection presents a comparative tech. and economic analysis of most effective methods and industrial processes for obtaining high labor productivity in machine building. Output may be stepped up by further standarization of machine tools, materials, and production methods; drawing on unused potentials. Covers all stages of planning and production as performed in modern plants of USSR, actual experience, and new methods are discussed.

SHTERN, L. T., "Technical Requirements for Production Lines (experience of the Krasniy Proletariy Plant imeni A. I. Yefremov)," p. 476. (

SHTERN, L.T.

Group machining of machine-tool parts. Stan. i intru. 29 no.7:7-15 Jl '58. (MIRA 11:9)
(Machine-shop practice)

YAKOBSON, Mikhail Osipovich, prof., doktor tekhn.nauk. Prinimala uchastiye IL'INA, K.A., inzh.. ANUFRIYEV, V.A., inzh., retsenzent; SHTERN, L.T., inzh., red.; MODEL', B.I., tekhn.red.

[Technology of machine-tool manufacture] Tekhnologiia stankostroeniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 547 p. (MIRA 13:5)
(Machine tools--Construction)

VALETOV, V.V.; VESNIK, M.I.; GONCHAROV, I.S.; DMITROV, D.V.; LUNEV, A.A.; MOKIN, M.I.; NESTEROV, S.N.; SMIRNOV, V.P.; ALEKSEYEV, S.A., retsenzent; KARKAZOV, A.G., retsenzent; KONDRATOVICH, V.M., retsenzent; LEVIN, B.M., retsenzent; MALIKOV, A.N., retsenzent; SEGALEVICH, S.M., retsenzent; SHPAGIN, A.I., retsenzent; SHTERN, L.T., retsenzent; YAKOBI, A.A., retsenzent; TIKHANOV, A.Ya., tekhn. red.; CHERNOVA, Z.I., tekhn. red.

[Establishing norms for the consumption of materials in machinery manufacture; manual] Normirovanie raskhoda materialov v mashinostroenii; spravochnik. Pod red. V.V.Valetova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol.1. 1961. 583 p. (MIRA 15:2)

(Machinery industry)

SHTERN, L.T.

Using plastic materials in manufacturing the 1K62 lathe. Stan.i instr. 32 no.10:23-27 O '61. (MIRA 14:9)
(Plastics) (Lathes)

SHTERN, Lazar' Tevel'yevich; GOLITSYN, Ya.K., ved. red.; APIRIN, B.S., inzh., red.; PONOMAREV, V.A., tekhn.red.

[Group manufacture of parts on high-production machines] Gruppovaia obrabotka detalei na vysokoproizvoditel'nykh stankakh. Moskva, Filial Vses.in-ta nauchn. i tekhn. informatsii, 1958. 11 p. (Peredovoi nauchno-tekhnicheskii i proizvoditel'nyi opyt. Tema 10. No.M-58-273/40)
(MIRA 16:3)

(Metalworking machinery)

SHTERN, L.T.

Use of thin-walled stamped and welded parts in the 1K62 lathe.
Stan.i instr. 34 no.3:15-18 Mr '63. (MIRA 16:5)
(Lathes)

SHTERN, Leybshi Yankelevich; BEYZEROV, Semen Moiseyevich; PLAVNIK, Valentin Gilyar'yevich; INDENBAUM, V.S., red.; GOLYATKINA, A.G., red. izd-va; VAYNSHTEYN, Ye.B., tekhn. red.

[Regulation and automation of air-blower and compresser plants] Regulirovanie i avtomatizatsiia vozdukhoduvnykh i kompressornykh stantsii. Pod obshchei red. L.IA.Shterna. Moskva, Metallurgizdat, 1963. 378 p. (MIRA 16:8)
(Compressors) (Blowers) (Automatic control)

SHTERN, L.Ya., inzh.; BEYZEROV, S.M., inzh.

Improvement of the control systems of the turbocompressors of cupola furnaces. Prom. energ. 19 no.3:26-32 Mr '64.
(MIRA 17:4)

L 62852-65 EWT(1)/EEC(m)/EWA(h) Peb

ACCESSION NR: AP5019083 UR/0286/65/000/012/0105/0105
621-522

AUTHOR: Shtern, L. Ya.; Liverant, E. I.

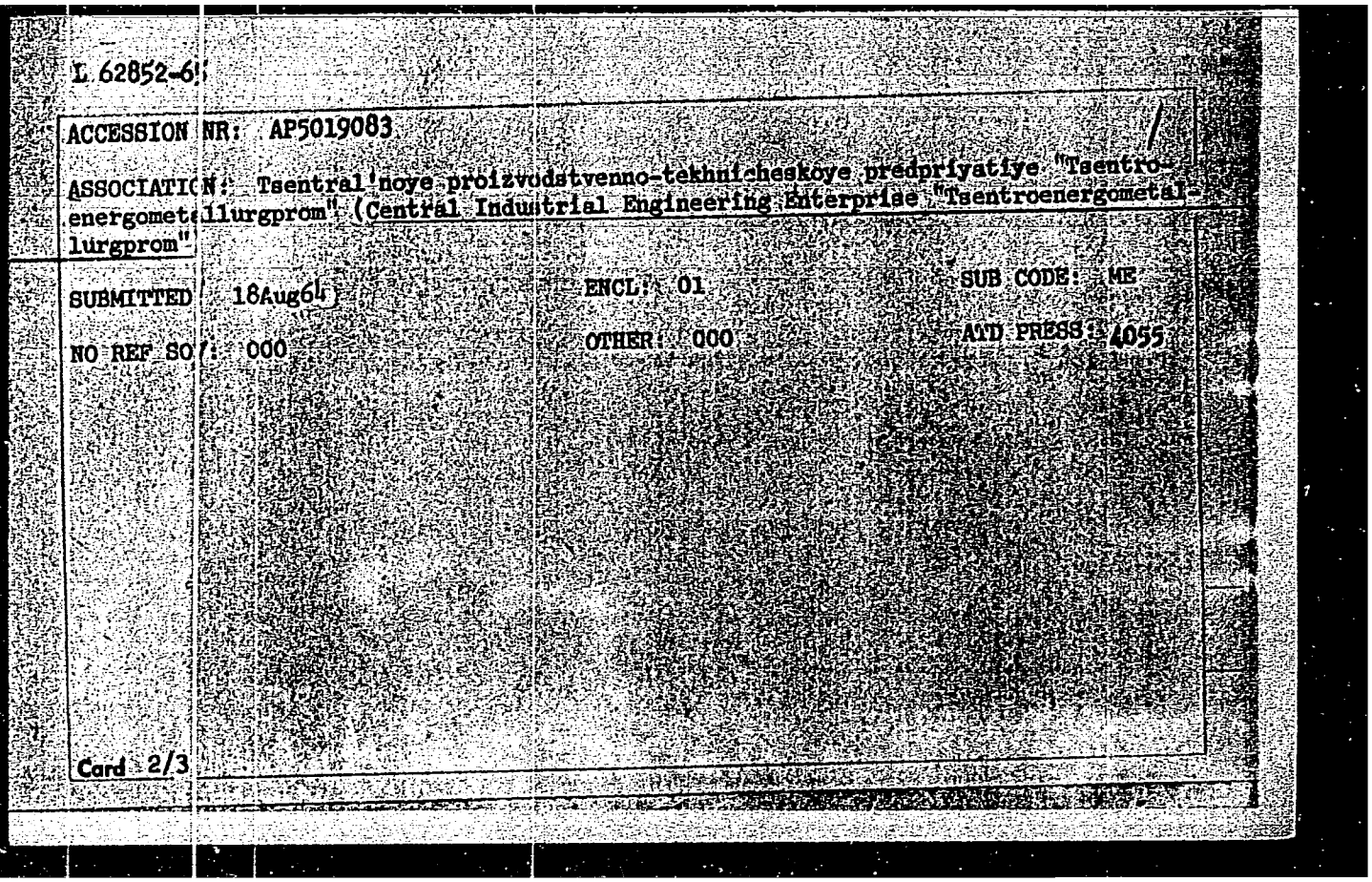
TITLE: Hydraulic transducer of the "nozzle-flapper" type. Class 42, No. 172142

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 105

TOPIC TAGS: hydraulic transducer, hydraulic equipment

ABSTRACT: This Author Certificate introduces a "nozzle-flapper" hydraulic transducer in which the main nozzle is connected by a channel with an auxiliary nozzle mounted on the opposite side of the flapper (see Fig. 1 of the Enclosure). A ball is inserted in the auxiliary nozzle which interacts with the flapper. This arrangement relieves the flapper of the strong action of the working liquid jet. Orig. art. has: 1 figure. [AC]

Card 1/3



L 62852-65

ACCESSION NR: AP5019083

ASSOCIATION: Tsentral'noye proizvodstvenno-tekhnicheskoye predpriyatiye "Tsentroenergometallurgprom" (Central Industrial Engineering Enterprise "Tsentroenergometallurgprom"

SUBMITTED 18Aug64 ENCL: 01 SUB CODE: ME

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L 62852-6

ACCESSION NR: AP5019083

ENCLOSURE: 01

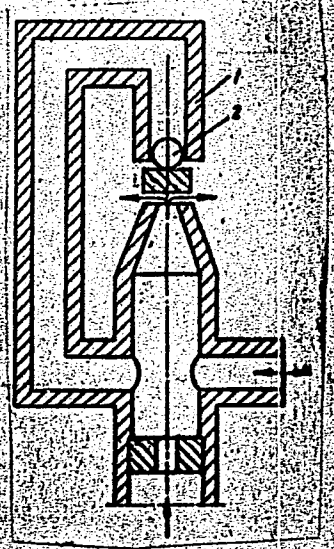
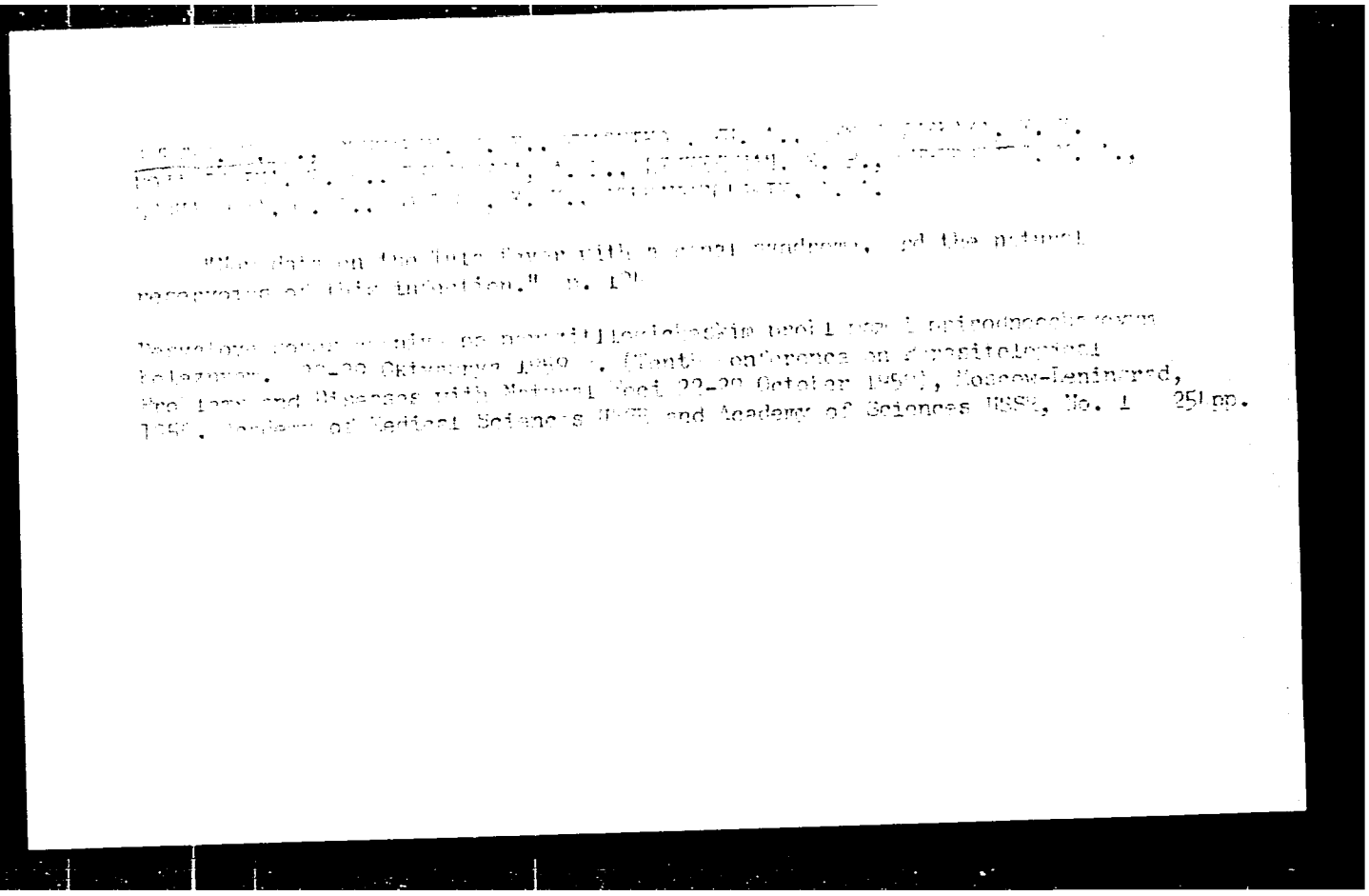


Fig. 1. Hydraulic transducer

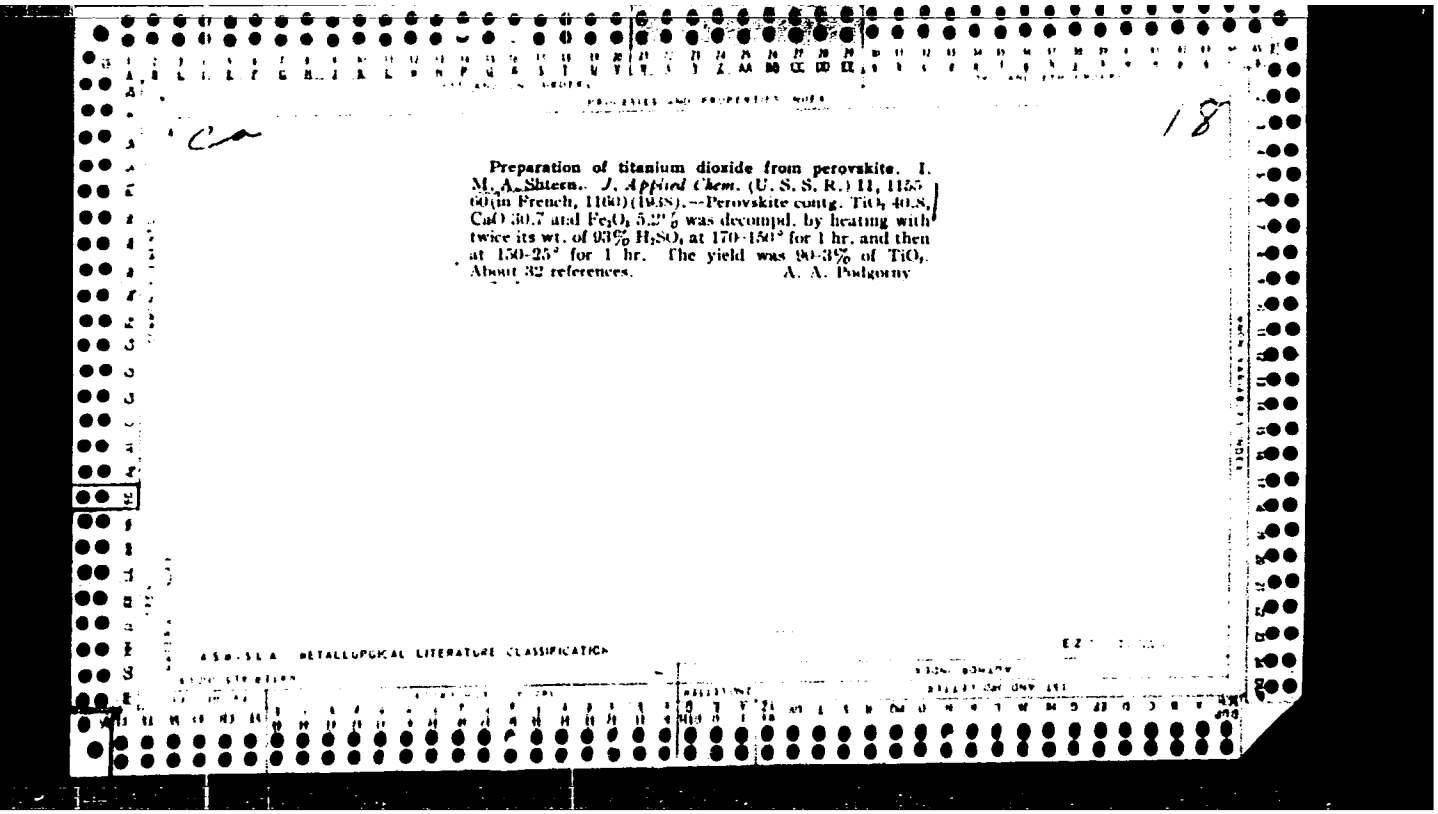
1 - Auxiliary nozzle; 2 - ball

Card 3/3



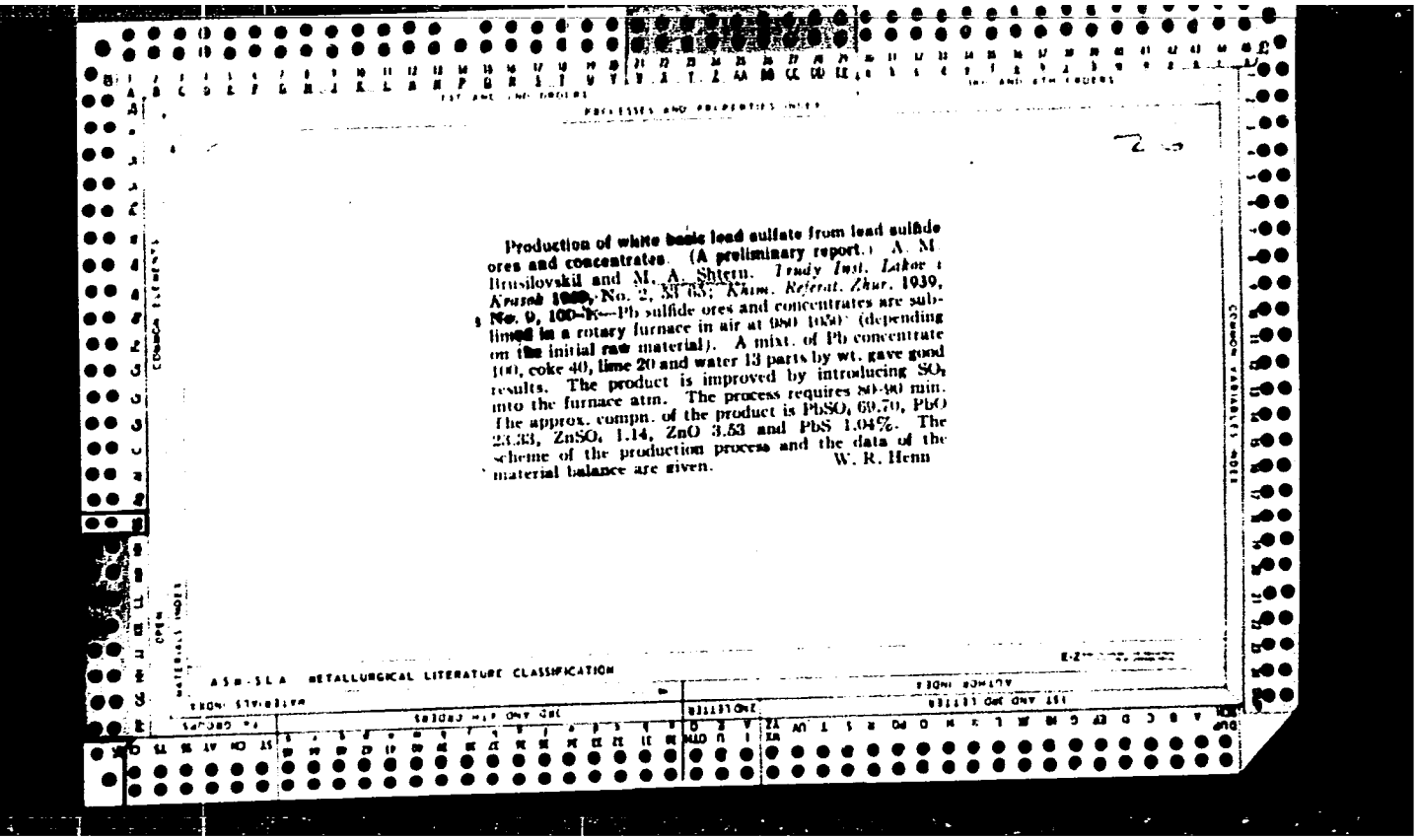
SETERN, M.A.

Epidemiology and prevention of Tula fever. Voen.-med. zhur. no. 6:33-35 Je '60. (MIRA 13:7)
(HEMORRHAGIC FEVER)



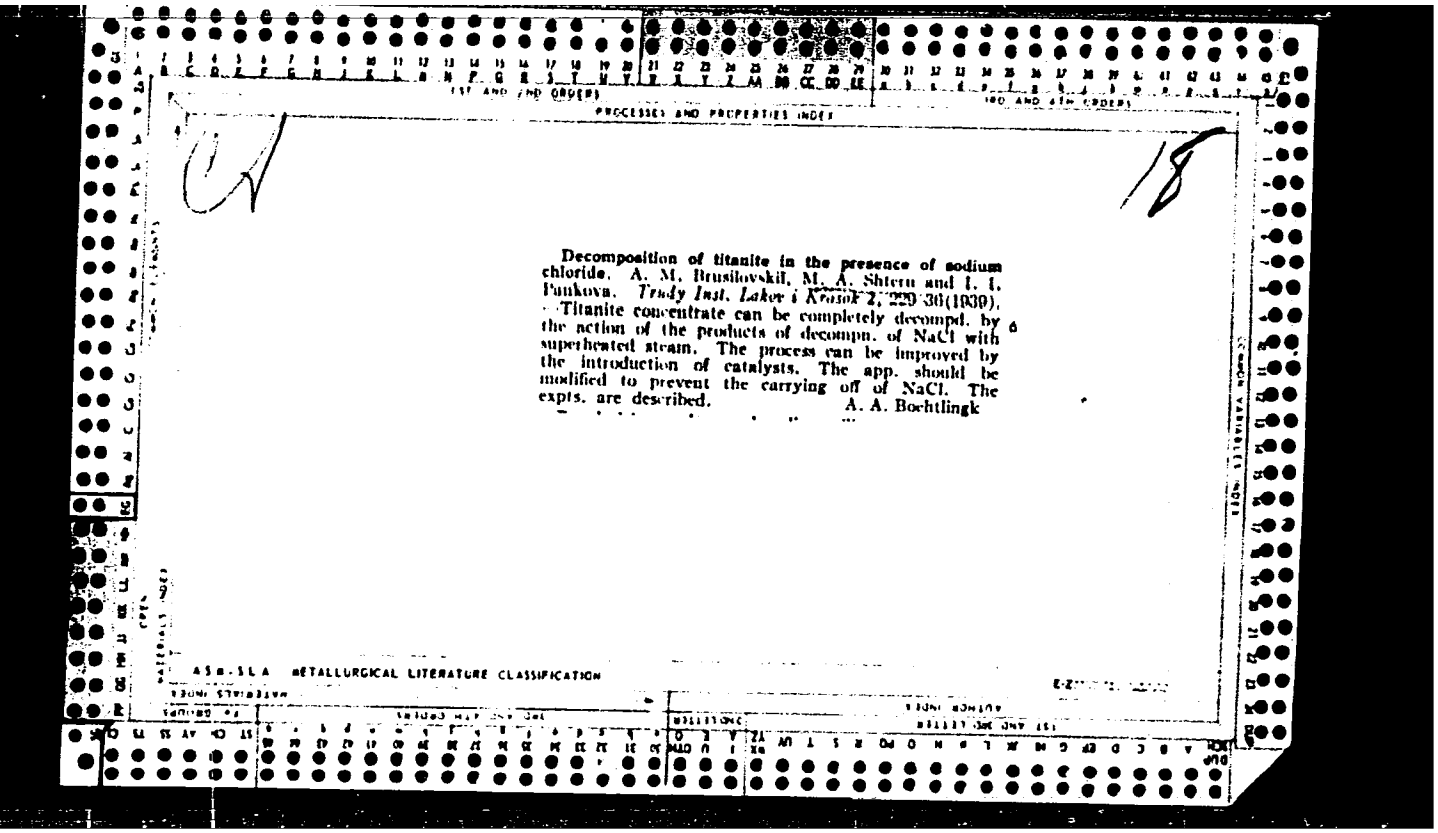
Preparation of titanium dioxide from perovskite. I. M. A. Shteen. *J. Applied Chem.* (U. S. S. R.) 11, 1155-60(in French, 1160)(1938).—Perovskite contg. TiO_2 40.8, CaO 30.7 and Fe_2O_3 5.2% was decompd. by heating with twice its wt. of 93% H_2SO_4 at 170-150° for 1 hr. and then at 150-25° for 1 hr. The yield was 90-3% of TiO_2. About 32 references. A. A. Bulgotny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Production of white basic lead sulfate from lead sulfide ores and concentrates. (A preliminary report.) A. M. Brusilovskii and M. A. Shtern. *Trudy Inst. Lakor i Kraski* 1939, No. 2, 33-63; *Khim. Referat. Zhur.* 1939, No. 9, 100-1.—Pb sulfide ores and concentrates are sublimed in a rotary furnace in air at 950-1050° (depending on the initial raw material). A mixt. of Pb concentrate 100, coke 40, lime 20 and water 13 parts by wt. gave good results. The product is improved by introducing SO_2 into the furnace atm. The process requires 80-90 min. The approx. compn. of the product is $PbSO_4$ 69.70, PbO 25.33, $ZnSO_4$ 1.14, ZnO 3.53 and PbS 1.04%. The scheme of the production process and the data of the material balance are given. W. R. Henn

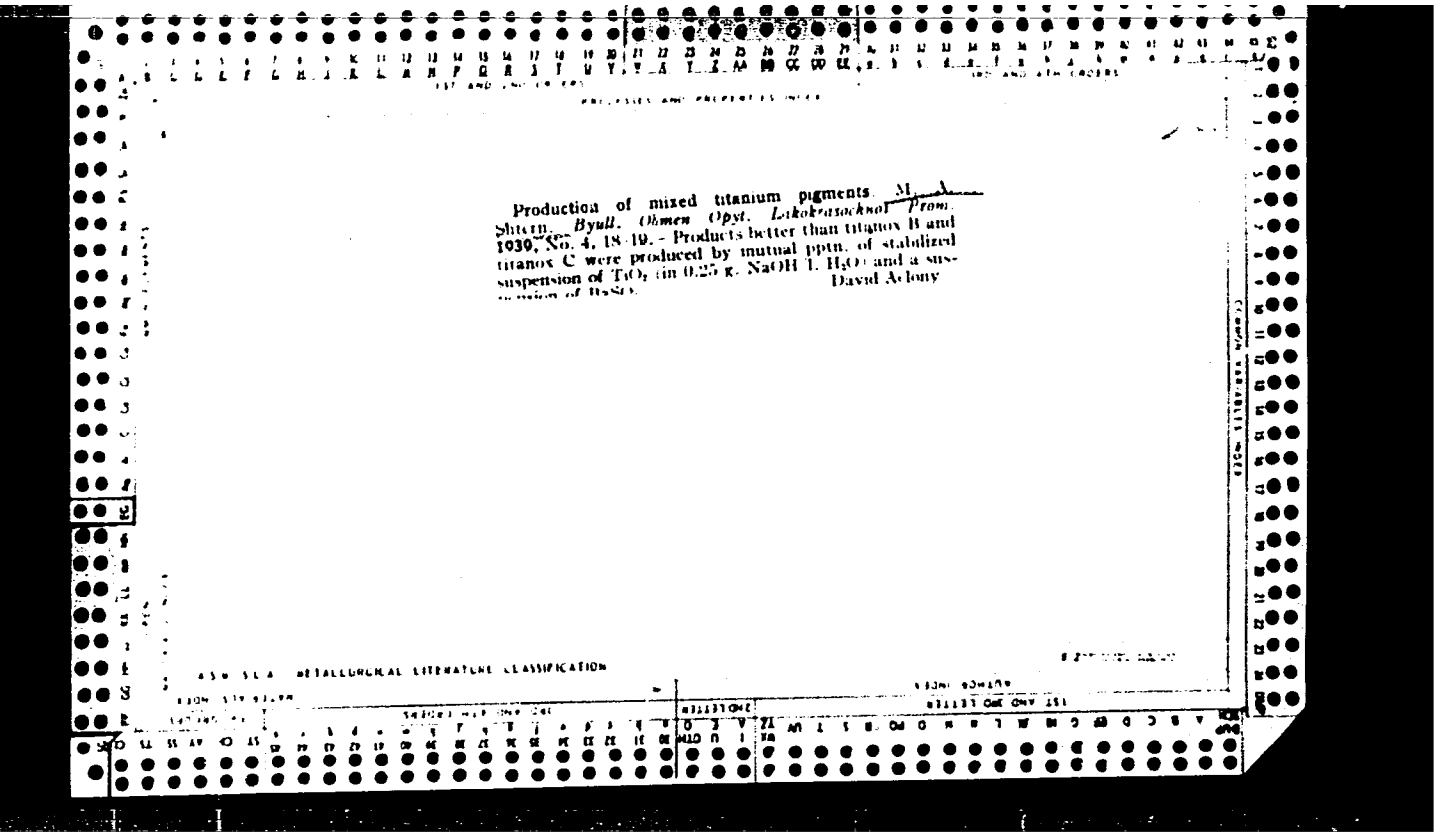
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

Decomposition of titanite in the presence of sodium chloride. A. M. Brusilovskii, M. A. Shtern and I. I. Pankova. *Trudy Inst. Lakov i Kozhi* 2, 229-36(1939). Titanite concentrate can be completely decompd. by the action of the products of decompn. of NaCl with superheated steam. The process can be improved by the introduction of catalysts. The app. should be modified to prevent the carrying off of NaCl. The expts. are described. A. A. Boehtlingk

A5a-11A METALLURGICAL LITERATURE CLASSIFICATION



Production of mixed titanium pigments. M. Shtern. *Byull. Obmen Opyt. Lakokrasochnoi Prom.* 1939, No. 4, 18-19. - Products better than titanox B and titanox C were produced by mutual pptn. of stabilized suspension of TiO_2 (in 0.25 N. NaOH 1. H_2O and a sus- suspension of $BaSO_4$.

David Aclony

A.C.S.

Chemistry + Physics

Titanium pigments from sphene. A. M. BRUSILOVSKII, M. A. SHTERN, AND I. I. PANKOVA. Russ. 57,165, May 31, 1940. 2 pp. 7.—A mixture of sphene crude or its concentrate and NaCl is treated at 900° to 1000° with superheated steam. The HCl which evolves is collected. The product from the steam treatment is leached with water and then treated with dilute HCl derived from the HCl collected in the first step of the process. The solid residue is either calcined and used as pigment or processed in the usual manner to yield TiO_2. M.Ho.

15-57-10-14361

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, pp 163-164 (USSR)

AUTHOR: Shtern, M. A.

TITLE: Possible Methods of Reprocessing Glauberitic Rocks From Deposits in Tyan'-Shan' (Vozmozhnyye sposoby pererabotki glauberitovoy porody mestorozhdeniy Tyan'-Shanya)

PERIODICAL: Tr. Vses. n.-i. in-ta galurgii, 1956, Nr 31, pp 99-106

ABSTRACT: The glauberitic rock of Tyan'-Shan' contains, in addition to glauberite ($Na_2SO_4 \cdot CaSO_4$), many halite and clay materials. This rock may be reprocessed to Na_2SO_4, Na_2S, H_2SO_4, HCl, and cement. For leaching the sodium sulfate by water, the author suggests a five-stage counterflow method, which produces 16 to 20 percent solutions of Na_2SO_4 and an extraction of 93 to 95 percent of the Na_2SO_4 from the rock. The yield of mirabilite on cooling such solutions down to 0° amounts to 300 to 450 kg/m^3. The author demonstrated experimentally the process of obtaining SO_2 (hence H_2SO_4) and

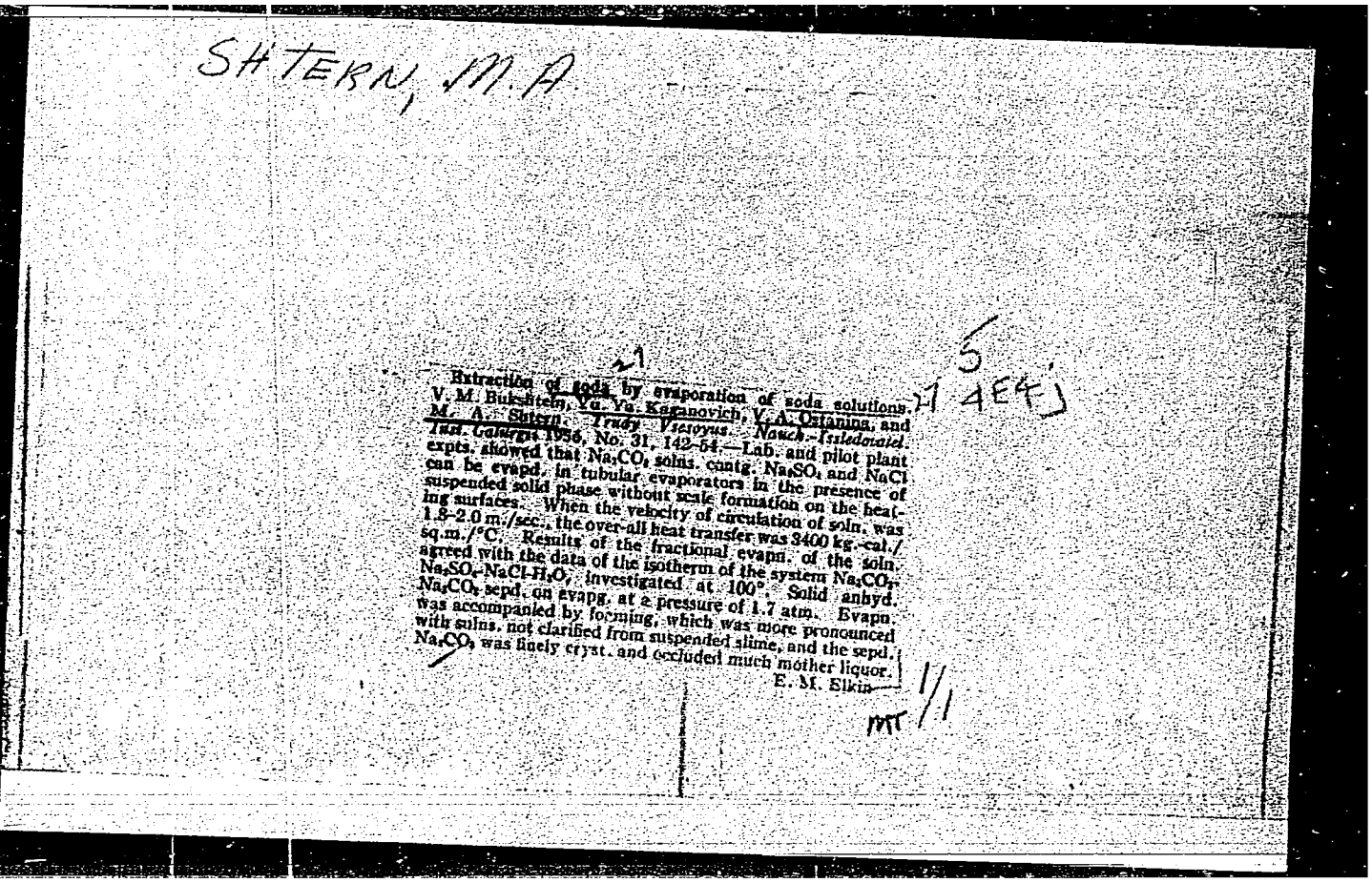
Card 1/2

Possible Methods of Reprocessing Glauberitic Rocks (Cont.) 15-57-10-14361

cement clinker from the residue left after leaching the glauberitic rock with water. He found that by roasting (at about 900°) glauberitic rock containing halite in the presence of steam, it is possible to convert approximately 70 percent of the gypsum and halite into sodium sulfate, and thus to enrich the rock almost 200 percent.

Card 2/2

V.P. Yeremeyev



SHTERN, M.A.

Extraction of soda by evaporation of soda solutions. V. M. Bukshteĭn, Yu. Ya. Kaganovich, V. A. Ostanina, and M. A. Shtern. *Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Galurgii* 1956, No. 31, 142-54.—Lab. and pilot plant expts. showed that Na_2CO_3 solns. contg. Na_2SO_4 and NaCl can be evapd. in tubular evaporators in the presence of suspended solid phase without scale formation on the heating surfaces. When the velocity of circulation of soln. was 1.8–2.0 m./sec., the over-all heat transfer was 3400 kg.-cal./sq.m./°C. Results of the fractional evapn. of the soln. agreed with the data of the isotherm of the system Na_2CO_3-Na_2SO_4-NaCl-H_2O, investigated at 100°. Solid anhyd. Na_2CO_3 sepd. on evapg. at a pressure of 1.7 atm. Evapn. was accompanied by foaming, which was more pronounced with solns. not clarified from suspended slime, and the sepd. Na_2CO_3 was finely cryst. and occluded much mother liquor.

E. M. Elkin

15.7300
~~5 (2), 15 (7)~~

S/064/59/000/07/009/035
B005/B123

AUTHORS: Shtern, M. A., Sukhanova, M. V.

TITLE: On the Production of Molybdate-chrome Red

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 7, pp 584 - 586 (USSR)

ABSTRACT: Molybdate-chrome red consisting of lead chromate, -molybdate, and -sulfate, is one of the most important inorganic red pigments. The authors investigated the dependence of the chrome red color on the velocity of precipitation. At the same time the influence of the order of sodium sulfate additions to the lead chromate solution was investigated. It was found that by adding the total amount of sodium sulfate at the beginning of precipitation, the precipitation of the undesired yellow monoclinic form of lead chromate can be prevented. Precipitations were obtained at 20° in a medium of pH 2. The concentration of the solutions was 0.1 m. While mixing it intensively, a mixture of the solutions of sodium bichromate, ammonium molybdate, sodium sulfate, and soda was added to the lead nitrate solution with varying velocity. In all experiments a pigment with constant composition 7 $PbCrO_4 . PbMoO_4 . PbSO_4$ was obtained. By

Card 1/3

adding soda a constant pH-value of the medium is achieved during precipitation. Table 1 shows the color changes of chrome red in dependence of the velocity of precipitation. Covering power and color intensity of obtained pigments are specified as well. It became evident that if the precipitation is retarded from 2-3 minutes to 25-30 minutes the chrome red color tone becomes deeper. During a further retardation the color tone of the pigment changes from light red to brown-orange. Investigations in the electron microscope (Figs 1-3) showed that the color change is caused by a recrystallization of the pigment grains to rod-like crystals during slow precipitation. Chrome red produced at an optimum precipitation rate is pure light red. When grinding it with a spatula, the pigment, however, shows yellow inclusions that prove the inhomogeneity of pigment grains in the mass. The authors investigated the influence of the reaction conditions on the color and the homogeneity of the chrome red coloring (Table 2). It appeared that if the majority of the mixture to be used for precipitation is added quickly to the lead nitrate solution, homogeneous particles are formed in the pigment mass. A sufficiently homogeneous pigment

On the Production of Molybdate-chrome Red

S/064/59/000/07/009/035
B005/B123

that is still red (not yet orange) is obtained by quickly adding a maximum of half the precipitant. Table 3 shows the influence of the pH-value of the medium at the end of the precipitation on the pigment color. The optimum pH-value lies between 1.8-2.2. With higher or lower pH orange-red pigments are formed. The authors found that additions of 1-2% aluminum oxide or silicic acid stabilize the pigment adequately so that during long storage in the parent solution and drying no color changes occur. Sodium silicate gives the pigment a more saturated color. As a summary of their investigations the authors specify the optimum technical conditions for the production of molybdate-chrome red. The method described has already been tested and introduced into the industry. There are 3 figures, 3 tables, and 5 references.

ASSOCIATION: Leningradskiy filial GIPI (Leningrad Branch of the State Design and Planning Scientific Research Institute of Varnish and Paint Industry)

Card 3/3

SHTERN, M.A.; GORELIK, G.N.

Continuous method for the production of lead chromates. Lakokras. mat. i ikh prim. no.2:50-55 '60. (MIRA 14:4)

1. Leningradskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta No.4.
(Lead chromate)

SHTERN, M.A.; GORELIK, G.N.

Purification of waste waters from the production of zinc and lead chromates by the post-precipitation method. Report 1. Lakokras. mat. i ikh prim. no. 6:34-38 '60. (MIRA 13:12)
(Sewage--Purification) (Lead chromate) (Zinc chromate)

SHTERN, M.A.; ZAVARINA, L.P.

Rapid method for determining the water soluble salt content of pigments. Lakokras.mat.i ikh prim. no.1:61-62 '62. (MIRA 15:4)

1. Leningradskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta lakokrasochnoy promyshlennosti.
(Pigments) (Salts)

ACCESSION NR: AP4018042 S/0303/64/000/001/0032/0034

AUTHORS: Shtern, M. A.; Danyushevskaya, N. Ye.,; Alekseyeva, O. V.

TITLE: Synthesis of the anticorrosion pigment chromium phosphate

SOURCE: Lakokrasochny*ye materialy* i ikh primeneniye, no. 1, 1964, 32-34

TOPIC TAGS: pigment, anticorrosion pigment, chromium phosphate, zinc chromate, phosphoric acid, reduction, polyvinylbutyral, priming, coverage, coating, sodium sulfite

ABSTRACT: The optimal conditions for the synthesis of chromium phosphate were determined and its physicochemical and technical properties investigated. It was found desirable to obtain chromium phosphate by reduction of sodium dichromate using sodium sulfite in the presence of phosphoric acid. The optimal conditions for the synthesis of chromium phosphate were a 1:15-1:20 ratio of solids to liquid, a pH of 2.5-3.0, a temperature of 35C, 1-2 hours boiling after completion of reduction, washing to leave not over 0.5% of water soluble salts, and drying at either 40-50C to obtain $CrPO_4 \cdot 5H_2O$, or at 105C to obtain $CrPO_4 \cdot 3.5H_2O$. The obtained compound was light green to green in color, had a specific surface of 15 m^2/gm and

Card 1/2

ACCESSION NR: AP4018042

a coverage capacity of 100-120 gm/m^2. The air-dried pigment contained 20.2% chromium, 37.0% PO_4, and 42.3% water. The protective effectiveness of the pigment was tested in a priming compound containing 10% polyvinylbutyral, 10% chromium phosphate, 1.6% talcum, and 78.4% of diluent, consisting of 18% phosphoric acid (89%), 80% ethanol, and 1.9% water. Ten per cent of this diluent were added to the priming composition, and the compound applied in one coat, 15 micrograms thick, onto the surface of steel, which had been previously etched and degreased. The final operation consisted of the application of a 35-40 microgram coat of GF-020 priming. Orig. art. has: 4 charts and 1 table.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 18Mar64 ENCL: 00

SUB CODE: CH NO REF SOV: 000 OTHER: 006

Card 2/2

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; GORDON, G.Ya. KOZHUSHKO, M.I.; KORENEV, G.P.; LAZAREVA, Ye.S.; LEYKEKHMAN, Ye.P.; MASLOV, A.I.; PAVLOV, G.A.; POLIVANOV, N.D.; ROMANOV, P.S.; RYBAKOV, P.S.; RYBAKOV, M.G.; SAMOKHVALOV, M.F.; SMIRNOV, M.S.; SHTERN, M.A.; CHEPKOV, V.N.

Experience with mass aerosol immunization with tularemia dust vaccine. Zhur. mikrobiol., epid. i imm. 41 no. 2:38-43 F '64. (MIRA 17:9)

L 40181-66 EWT(m)/EWP(j)/T/EWP(t)/ETI IJP(c) RM/JW/JD/JG/WE

ACC NR: AP6019447 (A) SOURCE CODE: UR/0303/66/000/003/0013/0018

AUTHOR: Shtern, M. A.; Danyushevskaya, N. Ye.; Vasserman, P. I.; Chebotarevskiy, V. V.

ORG: none

TITLE: Application of calcium chromate as an anticorrosion heat-resistant pigment

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 3, 1966, 13-18

TOPIC TAGS: calcium chromate, chromic anhydride, chromate, pigment, anticorrosive agent, heat resistance, CALCIUM COMPOUND, CHROMATE

ABSTRACT: A method has been developed for preparing calcium chromate by reaction of hydrated calcium oxide with chromic anhydride. It has been shown that calcium chromate is a pigment which imparts a higher passivating capacity as well as a higher heat resistance to magnesium alloys and steel. It has been established that the use of calcium chromate in soils improves their conservation properties. Orig. art. has: 5 figures and 5 tables. [AM]

SUB CODE: 07,11/ SUBM DATE: none ORIG REF: 001/ OTH REF: 00

Card 1/1 UDC: 667.622.117.6

MART'YANOV, Yu.A.; REVAZASHVILI, B.I.; SHTERN, M.D.

Wet grinding of iron scrap at the Karsakpai Ore Dressing Plant of the Dzhezkazgan Mining and Metallurgical Combine. TSvet. met. 33 no.11:11-17 N '60. (MIRA 13:11)

1.Kazmekhanobr.
(Karsakpai--Ore dressing) (Scrap metals)

SHTERN, M.I. (Moskovskaya obl., g.Khimki, ul.Kalinina, d.13,kv.14)

Defense of the London International Nomenclature of the Bronchi and Segments. Vest. rent. i rad. 35 no. 4:51-53 Jl-Ag '60. (MIRA 14:2)

1. Iz Moskovskoy gorodskoy klinicheskoy tuberkuleznoy bol'nitsy No.3 "Zakhar'ino" (glavnyy vrach V.P. Petrik).
(BRONCHI--RADIOGRAPHY)

SHTERN, M.I.; MIRINOV, G.B.; ZUGMAN, Ya.N.

Diagnosis of acquired pulmonary air cysts. Probl. tub. 42 no.12:61-62 '64. (MIRA 18:8)

1. Moskovskaya gorodskaya klinicheskaya protivotuberkuleznaya bol'nitsa Nr. 3 "Zakhar'ino" (glavnyy vrach V.P.Petrik).

SHTERN, M.I. (Moskovskaya obl.,g.Khimki,ul.Kalinina,d.13,kv.14)

Structure of the bronchial tree; schematic outline. Grud. khir. 2 no.3:79-82 My-Je '60. (MIRA 15:3)

1. Iz Moskovskoy gorodskoy klinicheskoy tuberkuleznoy bol'nitsy No.3 "Zakhar'ino" (glavnyy vrach V.P. Petrik).
(BRONCHI)

GO ,[illegible]YN, V.D.; SHTERN, M.I.

Bronchoglandular perforations in adolescents and adults with tuberculosis. Akt. vop. tub. no.2:92-114 '63. (MIRA 17:9)

1. SHTERN, M. R. PHARMACIST

2. USSR (600)

4. Pharmacology

7. "Textbook on pharmacology and prescription writing for feldsher and midwife schools." V. N. Kovalenko. Reviewed by Pharmacist M. R. Shtern. Feld'd. i akush. no. 12, 1952.

9. Monthly List of Russian Accessions. Library of Congress. March 1953. Unclassified.

SHTERN, M.S.

Vitamin B6 and its importance. Vrach.delo no.6:593-596 Je '58
(MIRA 11:7)

1. Mariupolskiy oblastnoy kozhno-venerologicheskiy dispanser.
(PYRIDOXINE)

SHTERN, M.R.

VOLITOVA, N.I., KATALKHERMAN, A.L., kand.farmatsevticheskikh nauk, SHTERN, M.R., provizor.

"Technology of drug forms" by P.E. Rozentsveig. Apt.delo 7 no.3:87-92 My-Je '58 (MIRA 11:7)
(PHARMACY)

SHTERN, M.R., provizor (Khar'kov)

Vitamin B_6 and its importance. Fel'd. i akush. 23 no.7:55-56 Jl'58 (MIRA 11:8)

(PYRIDOXINE)

SHTERN, M.R., provizor (Khar'kov)

Imanin, a new vegetable preparation. Fel'd. i akush. 24 no.9:60 S '59. (MIRA 12:12)

(BACTERICIDES)

SHTERN, M.R.

Vitamin B6 and its significance in skin diseases; review of the literature. Vest. derm. i ven. 33 no.2:42-47 Mr-Ap '59. (MIRA 12:7)

1. Iz Khar'kovskogo oblastnogo kozhno-venerologicheskogo dispansera (glavnyy vrach M.I. Lisin).

(VITAMIN B6, THER. USE,
skin dis., review (Rus))
(SKIN DISEASES, ther.
vitamin B6, review (Rus))

SHTERN, M.R., provizor (Khar'kov)

Erythromycin. Fel'd. i akush. 27 no.1:55-56 Ja '62. (MIRA 15:3)
(ERYTHROMYCIN)

SHTERN, M.R., provizor (Khar'kov)

Securinine nitrate. Fel'd. i akush. 27 no.2:47-50 F '62.
(MIRA 15:3)

(SECURININE)

SHTERN, N.A., inzh.

Mineral fertilizers, iron pyrites, and apatite concentrate. Trudy TSNIIEVT no.13:179-199 '58. (MIRA 11:12)
(Mineral aggregates--Transportation)

SHTERN, O.I., inzh.

Determining the resistance of concrete to tension by the cracking method. Transp. stroi. 14 no.1:48-49 Ja '64. (MIRA 17:8)