FILATOV, A.I., inzh., ved. red.; SOROKINA, T.M., tekhn. red.

[New building materials and the use of local materials] Novye stroitel'nye materialy i primenenie mestnykh materialov. Moskva, 1957. 18 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 61, no. S-57-25/2). (MIRA 11:12)

1. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii. Filial.

(Building materials)

LIVSHITS, Lev Samoylovich; FILATOV, A.I., inzh.,ved.red.; ZHELUDKOV, V.I., inzh.,red.; FOMICHEV, P.M., tekhn.red.

[Reusable devices for erecting reinforced concrete construction elements of multistoried buildings] Inventarnye prisposobleniia dlia montazha zhelezobetonnykh konstruktsii mnogoetazhnykh zdanii. Moskva, Filial Vses.in-ta nauchn.i tekhn.informatsii, 1957. 27 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 55, no.S-57-75/13) (MIRA 11:12)

(Hoisting machinery)

BAYYER, Yevgeniy Yakovlevich, inzh.; FILATOV, A.I., inzh.,ved.red.; CHAPLYGIN, D.V., inzh., red.; SOROKINA, T.M., tekhn.red.

[Experience in the manufacture and use of prestressed reinforced concrete elements] Opyt izgotovleniia i primeneniia napriazhenno-armirovannykh zhelezobetonnykh konstruktsii. Moskva, Filial Vses.in-ta nauchn. i tekhn. informatsii, 1957. 68 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 55, no.S-57-66/9) (MIRA 11:12)

(Prestressed concrete)

DESOV, Arseniy Yefimovich, doktor tekhn. nauk, prof.; FILATOV, A.I., inzh., ved. red.; ZHELUDKOV, V.I., inzh., red.; POMOMAREV, V.A., tekhn. red.

[New types of concretes and ceramics] Novye vidy betonov i keramiki. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1956. 103 p. (Obobshchaiushchie broshiury: Tema 3, no.B-56-8) (MIRA 16:9)

(Building materials--Testing)

FILATOV, A.I.

Efficiency of gas-discharge counters of weakly ionizing particles. Prib. i tekh. eksp. 9 no.3:40-43 My-Je '64 (MIRA 18:1)

Mechanism underlying the formation of multiple pulses in halide counters. Ibid.:44-46

AUTHOR: Filatov, A. I.; Stepanov, A. P.; Stotskiy, V. M.

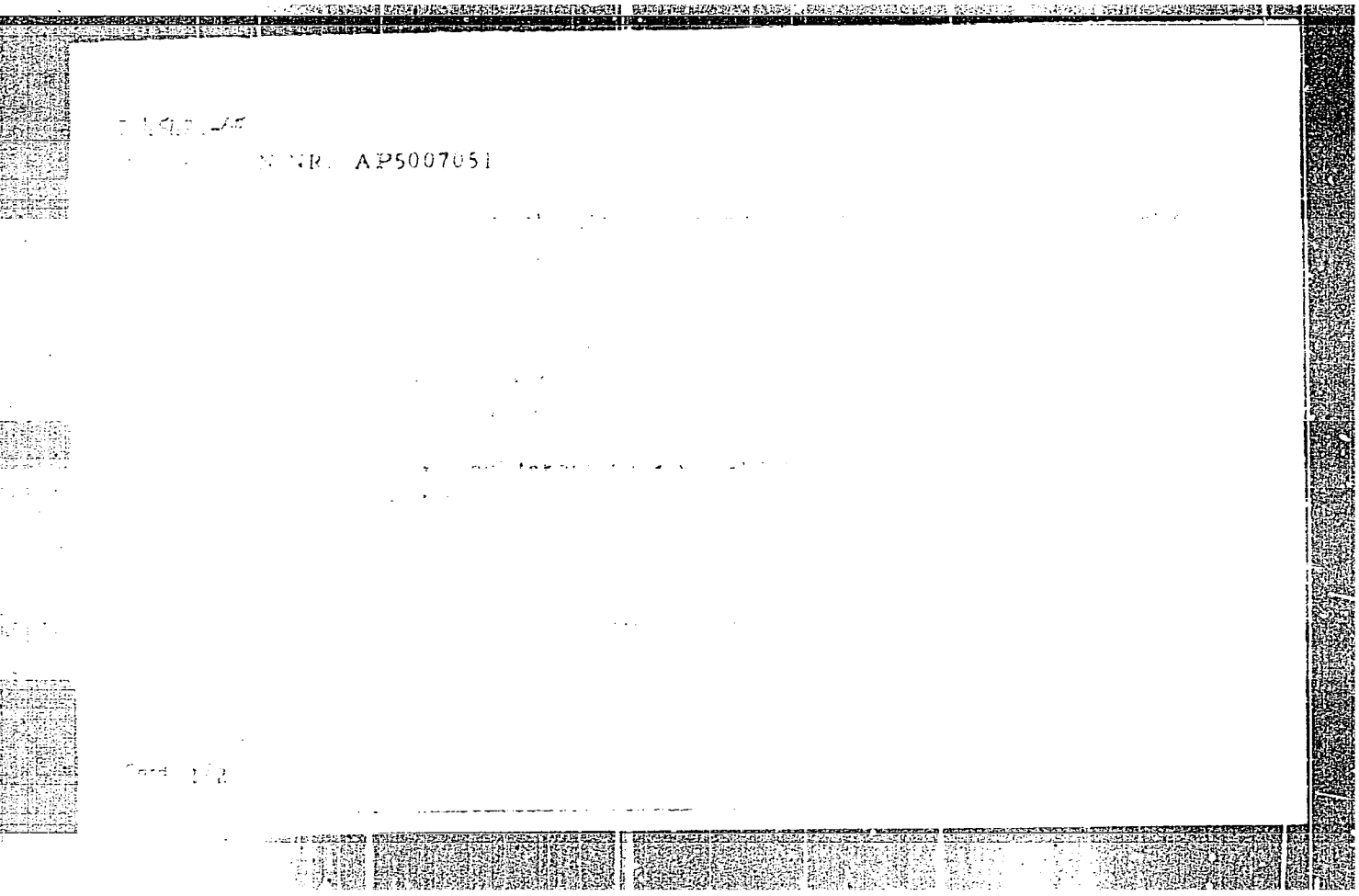
TITLE: Nuclear precession magnetometer with integrated polarization and [illegible] processes

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1965, 169-174

TOPIC TAGS: magnetometer, nuclear precession magnetometer, terrestrial magnetic field

ABSTRACT: A method is considered of measuring the terrestrial magnetic field [illegible]ed on the phenomenon of free nuclear pre[illegible] dynam[illegible] polarization of the protons of an aqueous solution of potassium nitro-[illegible] $K_2[NO(SO_3)_2]$. The operating cycle of the new magnetometer [illegible] three consecutive periods: (1) Dynami[illegible] working [illegible] measuring the frequency of the free [illegible] 2. Turning

Card 1/2



FILATOV, A.I.

Interrelationship between cerebral veins and arachnoid membrane at their transition from the subarachnoid to subdural space. Arkh. anat., gist. i embr. 48 no.6:43-50 Je '65. (MIRA 18:7)

1. Kafedra normal'noy anatomii (zav. - prof. V.N.Murat) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

L 24259-66 EWT(l)/EWT(m)/EWP(j)/ETC(m)-6 IJP(c) WW/RM
ACC NR: AP6007824 SOURCE CODE: UR/0120/66/000/001/0128/0132

AUTHORS: Stepanov, A. P.; Stotskiy, V. M.; Filatov, A. I. 67 66

ORG: Ural Polytechnic Institute, Sverdlovsk (Ural'skiy politekhnicheskiy institut) B

TITLE: Electron-nuclear double resonance spectrometer 21

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 128-132

TOPIC TAGS: nuclear resonance, electron paramagnetic resonance, electron paramagnetic spectrometer, paramagnetic relaxation, line width, hyperfine structure, magnetometer

ABSTRACT: The article describes apparatus for the observation of dynamic polarization of nuclei in solutions of paramagnetic substances. The apparatus contains a source for a constant magnetic field, a system for detecting the nuclear magnetic resonance signal (which is proportional to the nuclear polarization), and a system for the saturation of the EPR lines. The apparatus can be used to measure the coefficient of increase in the polarization of the nuclei, the

Card 1/2 UDC: 539.28.078

L 24259-66
ACC NR: AP6007824

nuclear and electronic relaxation times, the hyperfine structure of EPR spectra in a weak magnetic field (8 -- 50 Oe) at temperatures from 0 to +80C. Being designed for weak fields, where the conditions for strong narrowing of the resonant lines are easier to satisfy, the apparatus is simpler than that used for strong field measurements. The use of the equipment and its construction are described in detail. The accuracy is approximately 10%. As an example measurement results are presented for the hyperfine structure of the EPR spectra of solutions of DPPH in benzene, which could not be measured earlier, since the standard EPR technique is insufficiently sensitive for this purpose. The apparatus can also be used to select working media for nuclear precession magnotometers. Orig. art. has: 5 figures and 4 formulas.

SUB CODE: 20 SUBM DATE: 22Jan65/ ORIG REF: 003/ OTH REF: 007

Card 2/2

L 44349-66 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6012611 SOURCE CODE: UR/0182/66/000/004/0021/0023

AUTHOR: Frolov, G. N.; Filatov, A. I., Kofolev, V. N. 40 B

ORG: none

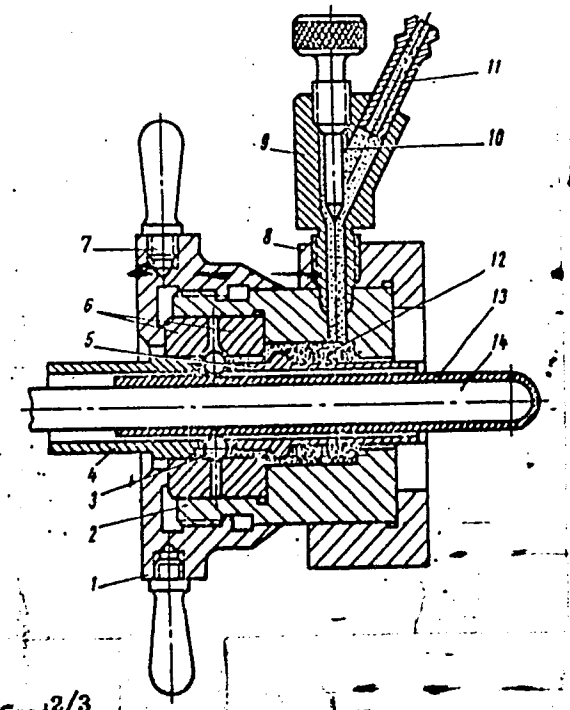
TITLE: Ball reeling of thin-walled small-diameter tubular products of Kh18N9T Cr-Ni steel 16 16 16

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 4, 1966, 21-23

TOPIC TAGS: beta radiation counter, chromium steel, metal machining, metal rolling / Kh18N9T Cr-Ni steel, SBM-9 20 beta-radiation counter, SBM-10 10 28 beta-radiation counter, SBM-11 beta-radiation counter, SBM-12 beta-radiation counter

ABSTRACT: The development of various instruments has raised the problem of fabricating special tubular products of a small diameter (2-6 mm) with walls as thin as 50-40 μ. These products must meet various special requirements such as: 1) satisfactory airtightness assuring the preservation of a vaccum of the order of $1 \cdot 10^{-5}$ mm Hg within the cavity for several years; 2) adequate purity of inside and outside surfaces, such as to dispense with the need for additional machining; 3) high elastic and strength properties of the walls, achieved by means of a high degree of work hardening (as much as 75%) during fabrication; 4) (in some cases)

Card 1/3 UDC: 621.98.986



comparatively large length (150-200 mm) for a diameter of 2 mm and a wall thickness smoothly varying from 0.05 to 0.1 mm. Such requirements cannot be met by the know techniques of deep drawing and roll reeling. Hence, the authors describe a technique specially developed for this purpose and based on the ball reeling of blanks of Kh18N9T Cr-Ni steel with the aid of a lathe-mounted adjustable ball head (Fig. 1)

Fig. 1. Adjustable ball head for ball reeling

1 - micrometric nut; 2 - housing; 3 - balls; 4, 5 - retainer bushings; 6 - supporting cones; 7 - grip; 8 - holder; 9 - connecting pipe; 10 - needle; 11 - nipple (for lubricant); 12 - spring; 13 - reeled tubular product; 14 - mandrel

L 44349-66

ACC NR: AP6012611 O

consisting of housing 2 with working balls 3 located in between supporting cones 6. As the cones recede from or approach each other owing to the rotation of micrometric nut 1, the balls either recede from or approach the center so that the inside diameter in between the balls, and hence also the diameter of the reeled tube, is varied. Blank (tube) 13, tightly slipped over smooth mandrel 14, serves as the inner ball race, so to speak. Working balls 3 revolve around the annular gap between the blank and cones 6 (which serve as the outer ball race, so to speak), thus exerting pressure on the wall of the blank as it revolves together with the mandrel. The products thus fabricated satisfy the requirements specified above. The decisive condition is the use of balls of a sufficiently small diameter (not more than 2 mm). Owing to the compaction of the material during reeling, the finished products display a satisfactory airtightness. At present the ball reeling of tubular products is regularly employed in the serial production of four types of beta-radiation counters: SBM-9, SBM-10, SBM-11, and SBM-12. Orig. art. has: 4 figures.

SUB CODE: 11, 13, 18/ SUBM DATE: none/

Card 3/3 blg

MOURA, Aristoteles; KUZ'MIN, L.F.[translator]; FILATOV, A.I. [translator]; KLESMET, O.G., red.; BORODIN, Yu.V., red.; DZHATIYEVA, F.Kh., tekhn. red.

[Foreign capital in Brazil] Inostrannyi kapital v Brazilii. Pod red. i s predisl. O.G.Klesmet. Moskva, Izd-vo inostr. lit-ry, 1961. 435 p. Translated from the Portuguese. (MIRA 15:5)
(Brazil--Investments, American)

FILATOV, A. K.

Filatov, A. K.

"The Surface Characteristics of Lowland Peat Deposits as Applied to Their Preparation for Mining Milled Peat." Min Higher Education USSR, Moscow Peat Inst. Moscow, 1955 (Dissertation for the degree of Candidate in Technical Sciences)

SO: Knizhnaya letopis' No. 27, 2 July 1955

SOV/124-58-5-6204

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 161 (USSR)

AUTHOR: Filatov, A.K.

TITLE: Trunk and Root Strength of Alder and Birch Trees Growing on Peat Bogs (Prochnost' drevesiny stvolov i korney ol'khi i berezy, proizrastayushchikh na torfyanykh mestorozhdeniyakh)

PERIODICAL: Tr. Mosk. torf. in-ta, 1957, Nr 6, pp 108-114

ABSTRACT: Bibliographic entry

1. Alder--Physiology 2. Birch--Physiology 3. Peat--Physiological effects

Card 1/1

PREDEIN, B.A.; FILIMONCHEV, M.I.; Prinimali uchastiye: SEM'IN, G.N.; FILATOV, A.M.

Short time-interval meter. Izm.tekh. no.1:28-30 Ja '63.
(MIRA 16:2)

(Automatic timers)

FILATOV, A.N., prof.

Some impressions from a trip to the U.S.A. Vest. khir. 92 no.5: 121-129 My '64. (MIRA 18:1)

1. Chlen-korrespondent AMN SSSR.

FILATOV, AN.

21050 Filatov, A.N. Rezul'taty poddiafragmal'noy vagotomil pri yazvennoy bolezni Vestnik Khirurgii im Grekova, 1949, No. 3, s. 28-35.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

FILATOV, A. N;GOSHKINA, A. I.

Use of fibrin dressing in therapy of burns. Khirurgiia, Moskva no.9:16-23 Sept. 1950. (CLML 20:1)

1. Of the Surgical Clinic (Head -- Prof. A. N. Filatov), Leningrad Order of the Red Banner of Labor Scientific-Research Institute of Blood Transfusion.

FILATOV, A.N;SIPOVSKIY, P.V.

Use of fibrin films and sutures in neurosurgery, healing of the dura mater by closure of wounds with fibrin films. Vopr. neirokhir. 14 no.5:19-25 Sept-Oct. 1950. (CLML 20:1)

1. Of the Surgical Division (Head -- Prof. A. N. Filatov) and the Pathologico Anatomic Division (Scientific Director -- Prof. P. V. Sipovskiy) of the Leningrad Order of the Red Banner of Labor Scientific-Research Institute of Blood Transfusion.

FILATOV, A. N., SINOVSKII, P. V.

Results in application of a fibrin membrane and filaments in neurosurgery; dynamics of absorption of fibrin filaments in the nerve. Vopr. neirokhir. 14:6, Nov.-Dec. 50. p. 25-9

1. Of the Surgical Division (Head — Prof. A. N. Filatov) and the Pathalogo-Anatomic Division (Scientific Director — Prof. P. V. Sipovskiy), Leningrad Order of the Red Banner of Labor Scientific-Research Institute of Blood Transfusion (Scientific Director — Prof. A. N. Filatov).

CLML 20, 3, March 1951

FILATOV, A.N.

New surgically important therapeutic preparations of the Leningrad Institute for blood transfusion. Vest.khir.Grekova 70 no.5:34-38 1950. (CLML 20:5)

1. Of the Leningrad Order of the Red Banner of Labor Scientific-Research Institute of Blood Transfusion (Scientific Director—A.N. Filatov).

FILATOV, A. M. and ANDRIANOVA, I. G.

"Bioplast Masses from Blood for Surgical Purposes," Acad. Sci., June 1951

Translation D 513904

D513904

USSR/Medicine - Blood Transfusion Mar 51

"Transfusion of Dry Plasma Solutions in Serious Operations," A. N. Filatov, A. M. Romanova, Surg Clinic Dry Blood Prepns Lab, Leningrad Order of Labor Red Banner Inst of Blood Transfusion

"Vest Khirurgii" Vol LXXI, No 3, pp 13-16

Investigation was conducted on whether infusion of dry plasma soln can replace transfusion of conserved blood when prolonged stabilization of blood pressure is required in serious operations, and on the preferable concn of plasma. In 5 cases investigated, 600-800 ml diluted plasma prevented shock and increased blood pressure. The prepn contains greater

183T75

USSR/Medicine - Blood Transfusion (Contd) Mar 51

amt of shock-preventive stimulants than the erythrocytic mass, effects economy in the use of whole blood, can be stored for years without danger of spoiling, and can be prepared immediately before use. In diluting plasma of normal concn, blood-substituting salt soln LIPK No 3 was used (4 vols LIPK No 3 per 1 vol plasma).

FILATOV, A. N.

183T75

FILATOV, A. N., Prof.

USSR/Medicine - Plastic Surgery Sep/Oct 52

"Application of Preparations From Blood Fibrin in Experiments on Animals and in Surgical Practice," Prof A. N. Filatov, Prof P. V. Sipovskyy, Surg Clinic and Pathoanat Dept, Leningrad Order of Labor Red Banner Sci Res Inst of Blood Transfusion

"Vest Khirurgii" Vol 72, No 5, pp 29-32

Authors describe exptl use of blood fibrin in the treatment of open wounds in animals, and in some surgery of humans. They report a rapid healing of open wounds on application of a fibrin film.

229T54

(1)

FILATOV, A. N., Prof

Card 2 of 2

The wounds closed by primary union, with very little granulation, and a thin layer of scar tissue observed only by microscope. In expts with injured organs (intestinal walls, liver, spleen) heterogeneous films and sutures were used. Postoperative exams revealed the rapid resorption of fibrin threads, as compared with catgut, and other std suture material. Authors state that in view of their fragility, these sutures cannot be recommend for wide surgical use. Surgery in humans demonstrated the efficiency of blood fibrin film in plastic surgery of ulcerations, as a hemostatic agent in cholecystectomies, in peritoneal injuries after spleenectomies in

(2)

229T54

dermal injuries with destruction of the epithelium layer, and in the treatment of abrasions and bed sores. States that expts on dogs proved the efficiency of the fibrin film in treatment of injuries of duramater. Authors advise that by authority of the Sci Med Council Min of Pub Health USSR, mass prepn of fibrin film for external use has been delegated to the Myasokombinat /Meat Combine/ of Leningrad. Fibrin films used in neurosurgery and int surgery are prepd at the authors' institute from human blood. Also briefly describe a new type of absorbent cot on prepd from blood fibrin and recommended for its high hygroscopic properties.

(3)

229T54

FILATOV, A.N.

VOLODIMIROVA, T.N.; KRUTOGOLOVA, F.M.; FILATOV, A.N., professor, nauchnyy rukovoditel'.

Application of hemotherapy in ulcers in ambulant patients. Terap.arkh.25 no.3:31-35 My-Je '53. (MLRA 6:9)

1. Leningradskiy ordena Trudovogo Krasnogo Znameni institut perelivaniya krovi. (Ulcers) (Blood as food or medicine)

FILATOV, A.N., professor.

"Blood substitutes and their use in military therapeutic organizations." Vest.khir. 74 no.1:84-85 Ja-F '54. (MLRA 7:2)
(Medicine, Military) (Blood plasma) (Sel'tsovskii, P.L.)

W-30860, 18 Aug 54

FILATOV, A. N., professor., ul. Nekrasova, D. 60, kv. 131

Further development of the problem of blood transfusion. Vest. khir. 74 no.8:3-10 D '54. (MLRA 8:10)

1. Chlen-korrespondent AMN SSSR. Iz Leningradskogo ordena Trudovogo Krasnogo Zanmeni nauchno-issledovatel'skogo instituta perelivaniya krovi (nauchn.rukovod.prof. A.N. Filatov)
(BLOOD TRANSFUSION)

5090. (1099) FILATOV A.N. Inst. of Blood Transfusion, Leningrad. * Prophylaxis and treatment of some complications of transfusion (Russian text) KHIRURGIJA (Mosk.) 1955, 3 (13-17)

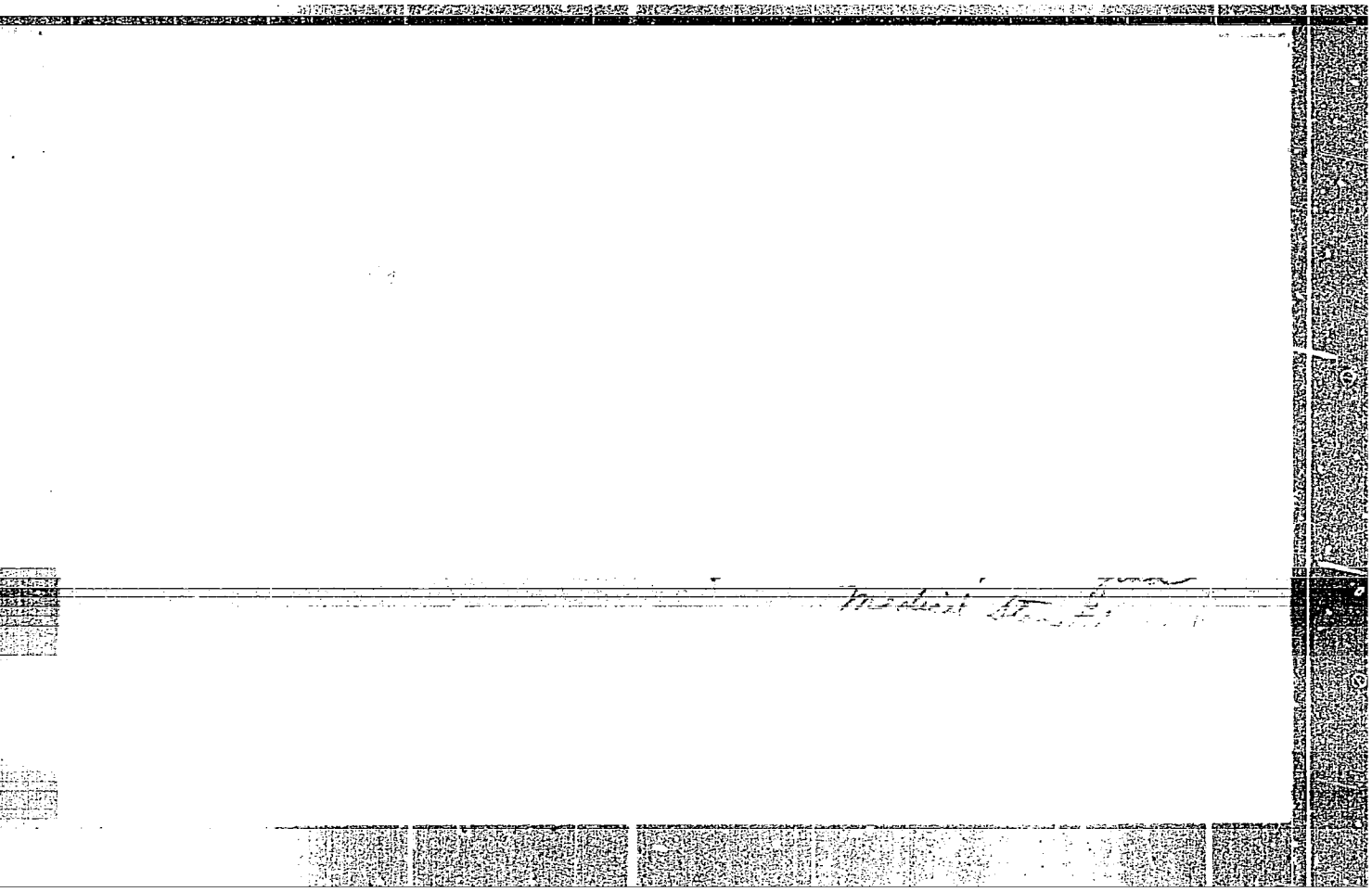
Many complications of blood transfusion are due to a special sensitization of the patient by the underlying disease, e.g., by absorption of products of tissue breakdown in long-lasting processes, also in tb, and in metastasizing malignant tumours. For desensitization, pyramidon, pantopon, morphine or, as recommended by Besredka, s.c. injection of 5 ml. of the prepared blood 1 hr. before the transfusion is administered. The well-known methods of blood group determination and the previous tests prevent the use of incompatible blood. Blood from universal donors is perfectly tolerated up to 1 l.; when larger amounts are necessary, the transfusion of 1 l. of a substitute fluid should be inserted; the administration of blood from universal donors can then be resumed without harm. Severe complications are brought about by the use of infected preserved blood; they can be prevented by sterile withdrawal and transfusion of the blood in a closed system, and by bacteriological examinations. Formerly, in 70% of the cases, after perfect blood transfusion, rigor was observed; this is now nearly entirely prevented by the use of apyrogenic instruments and apyrogenic fluids. After transfusion of incompatible blood, a severe shock develops, which is due, among other factors, to spasm of the renal vessels. The treatment of this shock consists of venepuncture of 300 to 400 ml. and subsequent transfusion of 500 to 600 ml. of blood of the same group. A larger exchange transfusion can also be carried out. For instance, withdrawal of 3,630 ml. and transfusion of 4,600 ml. of the same group was successful. The treatment is completed with A. V. Visnevškij's procaine block of the renal bed. In uraemic phenomena repeated gastric lavage and hot baths once or twice per day are useful. When after the use of compatible blood there is shock and the blood is suspected of infection, the administration of antibiotics is recommended, and also suppression of the symptoms by administering anaesthetics or somniferics. Moreover, an exchange transfusion of 4 to 5 l. is advisable.

Corr. Mbr Acad Med. Sci

FILATOV, A.N., prof.

Present status of the problem of preserved blood. Akt.vop.perel.krovi no.4:46-54 '55. (MIRA 13:1)

1. Chlen-korrespondent AMN SSSR.
(BLOOD--COLLECTION AND PRESERVATION)



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000413020009-2"

FILATOV, A.N., professor.

Use of blood components and preparations in surgery. Khirurgiia, no.11:20-26 N '55. (MLRA 9:6)

1. Chlen-korrespondent AMN SSSR. 2. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi (dir. dotsent A.D. Belyakov)
(BLOOD DERIVATIVES, ther. use)

5085. (1094) FILATOV A.N. *Problems of haematology and blood transfusion (Russian text) VESTN.KHIR.(Mosk.) 1955, 75/1 (77)

Up to the beginning of 1944, there had not been a blood transfusion service in Bulgaria. After the liberation an institute for haematology and blood transfusion was founded with the aid of the Soviet Army. This institute, which developed splendidly in the following years, has now published 12 scientific works which are for the main part concerned with isoserology. One study deals with 'Nervousnes in haematology', others with 'Complications in blood transfusions'. In the work titled 'Personal experiences with the resuscitation of the organism by arterial blood transfusion after clinical death due to acute blood loss', the first reports on experiments in dogs according to W.A.Negovski's complex method are published. Other studies were concerned with the preservation of blood. The collection is of great theoretical and practical value.

FILATOV, A.N., professor.

The problem of blood substitutes; a critical review. Vest.khir. 76 no.10:84-100 N '55. (MLRA 9:1)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR, Leningrad.
(PLASMA SUBSTITUTES
review)

Translation W-31755, 18 May 56

FILATOV, A.N., professor

Report of the chairman of the administration of the Pirogov Surgical Society on the society's work in 1954-1955. Vest. khir. 76 no.11: 150-153 '55. (MLRA 9:4)

(SURGERY--SOCIETIES)

FILATOV, A.N., professor; GOLOVIN, G.V.

Thirty-fourth plenum of the academic council of the Central Institute of Hematology and Blood Transfusion, May 23-28, 1955. Vest. khir. 76 no.11:157-166 '55. (MLRA 9:4)

(BLOOD PLASMA SUBSTITUTES) (BURNS AND SCALDS)

FILATOV, A.N., professor; DEPP, M.Ye.

Parenteral feeding in surgery. Probl.gemat. i perel.krovi 1 no.4: 3-8 Jl-Ag '56. (MLRA 10:1)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi (dir. - dotsent A.D.Belyakov). 2. Chlen-korrespondent AMN SSSR (for Filatov)
(INFUSIONS, PARENTERAL,
in surg. (Rus))

FILATOV, A.N., professor

Historical data on blood transfusion in Russia and works of Soviet scientists. Khirurgiia 32 no.1:47-52 J '56 (MLRA 9:6)

1. Chlen-korrespondent AMN SSSR.
(BLOOD TRANSFUSION, hist.
in Russia)

KUPRIYANOV, P.A., professor,; MEL'NIKOV, A.V., professor,; FILATOV, A.N., professor.

Sixteenth International Congress of Surgeons. Vest. khir. 77 no.1: 152-157 Ja '56 (MLRA 9:5)

(SURGERY--CONGRESSES)

KUPRIYANOV, P.A.,professor,; MEL'NIKOV, A.V.professor,; PILATOV, A.N. professor.

Surgical clinics in the Scandinavian countries. Vest. khir. 77 no.2:136-141 F '56 (MLRA 9:6)

(SURGERY, OPERATIVE
surg. hosp. in Scandinavia)
(HOSPITALS
same)

FILATOV, A.N., professor (Leningrad, ul.Nekrasova, d.60, kv. 131); DEPP, M.Ye.; CHAPLYGINA, Z.A.

Use of parenteral protein infusion in surgery [with summary in English, p.157] Vest.khir. 77 no.6:3-11 Je '56. (MLRA 9:8)

1. Chlen-korrespondent AMN SSSR (for Filatov). 2. Iz khirurgicheskoy kliniki Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniia krovi (dir. - odts. A.D. Belyakov).

(INFUSION, PARENTERAL,
protein hydrolysates in surg.(Rus))
(PROTEINS,
hydrolysates, parenteral infusion in surg. (Rus))
(SURGERY, OPERATIVE,
perenteral infusion of protein hydrolytes in (Rus))

FILATOV, A.N., professor; DEPP, M.Ye.

Preparation and testing of a blood preparation which improves healing processes [with summary in English, p.157] Vest.khir. 77 no.6:33-37 Je '56. (MLRA 9:8)

1. Chlen-korrespondent AMN SSSR (for Filatov) 2. Iz khirurgicheskoy kliniki (zav. - prof. A.N.Filatov) Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi. Leningrad, 2-ya Sovetskaya ul., d. 16, Institut perelivaniya krovi. (SERUTHERAPY,
dry blood with penicillin prep., eff. on exper. wds. healing (Rus))
(PENICILLIN, effects,
on exper. wds. healing, with dry blood prep. (Rus))
(WOUNDS AND INJURIES, experimental,
eff. of dry blood-penicillin prep. (Rus))

FILATOV, A. N., (Prof., Corr. Mem. Acad. Med. Sci. USSR)

"Hemotherapy in Trauma."

paper presented at 11th Session of General Conf. on the Problem of Trauma, Acad. Med. Sci. USSR., , Moscow, 15 - 20 Apr 57.

Sovetskoye Zdravookhraneneiye Kirgizii, Frunze, No. 6, Nov/Dec 57, pp 60-64.

FILATOV, A.N., professor

Blood transfusion in the U.S.S.R. during the last 40 years. Probl. emat. i perel.krovi 2 no.4:3-11 Jl-Ag '57. (MIRA 10:10)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni instituta perelivaniya krovi (dir. - dotsent A.D.Belyakov, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.N.Filatov)
(BLOOD TRANSFUSION, history,
in Russia (Rus))

FILATOV, A.N., prof.; CHAPLYGINA, Z.A.; DEPP, M.Ye.; GREBENSHCHIKOVA, L.A.; ABRAMOV, V.S.; BLINOVA, A.I.; POVERGO, N.S.; LUGANOVA, I.S. (Leningrad)

Comparative study of some solutions made of heterogenous protein; L-103 solution and Belen'kii's serum. Klin.med. 35 no.7:47-53 Jl '57. (MIRA 10:11)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi. 2. Chlen-korespondent AMN SSSR (for Filatov).

(AMINO AICD MIXTURES,
protein hydrolysates L-103 & Belenkii's serum, comparison (Rus))

FILATOV, A.N. (Leningrad)

Results of the Sixth World Congress of Hematologists and Sixth Congress of the International Society of Blood Transfusion, held in Boston on August 26 to Sept.5, 1956. Vest.khir. 78 no.1:134-140 Ja '57. (MLRA 10:3)

1. Chlen-korrespondent AMN SSSR.
(BLOOD—TRANSFUSION)

FILATOV, A.N., professor (Leningrad, 2-ya Sovetskaya ul., d.16)

Visit to surgical clinics of medical scientific centers in the U.S.A. Vest.khir. 78 no.2:131-144 F '57. (MLRA 10:3)

1. Chlen korrespondent AMN SSSR.
(SURGERY
surg. clinics of U.S.hosp. (Rus))

FILATOV, A.N., professor (Leningrad)

"Thrombosis and embolism" [in German]; proceedings of the First International Congress in Basel, 1954. Vest.khir. 78 no.6:141-144 Je '57. (MLRA 10:8)

1. Chlen-korrespondent AMN SSSR
(THROMBOSIS) (EMBOLISM)

FILATOV, A.N., professor; GOLOVIN, G.V., dotsent

Achievements in the field of blood transfusion in the U.S.S.R. and the role of Soviet surgeons in its development during the past 40 years. Vest.khir. 79 no.7:3-17 Jl '57. (MIRA 10:10)

1. Chlen-korrespondent AMN SSSR (for Filatov)
(BLOOD TRANSFUSION,
in Russia (Rus))

FILATOV, A.N. (Leningrad)

"Special surgical therapy" [in German] by Prof. Dr. Max Saegesser. Reviewed by A.N.Filatov. Vest.khir. 79 no.8:131-133 Ag '57. (MIRA 10:10)

1. Chlen-korrespondent AMN SSSR.
(SURGERY) (SAEGESSER, MAX)

PETROV, Ioakim Romanovich; FILATOV, A.N.

[Blood plasma substitutes] Plazmozameshchaiushchie rastvory. Medgiz, 1958. 235 p. (MIRA 12:2)
(BLOOD PLASMA SUBSTITUTES)

FILATOV, A.N., prof.

Basic principles of the treatment of thrombo-embolic diseases.
Khirurgiia 34 no.1:43-50 Ja '58. (MIRA 11:3)

1. Chlen-korrespondent AMN SSSR.
(THROMBOEMBOLISM, surgery,
(Rus)

FILATOV, A.N., prof. (Leningrad)

"Textbook of surgical diseases" by P.L. Sek'tsovskii. Reviewed by A.N. Filatov. Vest.khir. 81 no.8:135-136 Ag '58 (MIRA 11:9)

1. Chlen-korrespondent AMN SSSR.
(SURGERY)
(SEK'TSOVSKII, P.L.)

FILATOV, A.N., prof. (Leningrad, ul. Nekrasova, d.60, kv. 131).
LITMANOVICH, K.Yu., DANILOV, Ye.N.

Intimal thrombectomy and use of stored vascular grafts in obliterating disorders of arteries of the lower extremities.
Vest.khir. 81 no.9:90-100 S '58 (MIRA 11:11)

1. Iz khirurgicheskoy kliniki (zav. - prof. A.N. Filatov) Leningradskogo nauchno-issledovatel'skogo instituta perelivaniya krovi 2. Chlen-korrespondent AMN SSSR (for Filatov).
(THROMBOANGIITIS OBLITERANS, surgery
intimal throbectomy & vasc. grafting in lower extremitis (Rus))

FILATOV, A.N. prof. (Leningrad, ul. Nekrasova, d.6o, kv.131)

Current status of the transplantation of tissues and organs [with summary in English]. Vest.khir. 81 no.10:3-10 O '58 (MIRA 11:11)

1. Chlen-korrespondent AMN SSSR.
(TRANSPLANTATION,
current status, review (Rus))

TUSHINSKIY, Mikhail Dmitriyevich; YAROSHEVSKIY, Arnol'd Yakovlevich. Prinimali uchastiye: FILATOV, A.N.; AKKERMAN, V.V., doktor med.nauk; SHERMAN, S.I., prof.; TSIMMERMAN, N.A.. MYASNIKOV, A.L., prof., red.; SHTUTSER, N.V., red.; SENCHILO, K.K., tekhn. red.

[Blood system diseases] Bolezni sistemy krovi. Moskva, Gos. izd-vo med.lit-ry, 1959. 386 p. (MIRA 12:9)

1. Chlen-korrespondent AMN SSSR (for Filatov). 2. Deystvitel'nyy chlen AMN SSSR (for Myasnikov).
(BLOOD--DISEASES)

FILATOV, A.N., prof.

Work of the Leningrad Institute of Blood Transfusion for a quarter of a century. Akt.vop.perel.krovi no.7:7-19 '59. (MIRA 13:1)

1. Chlen-korrespondent AMN SSSR.
(BLOOD--TRANSFUSION)

FILATOV, A.N., prof.; GANKEVICH, G.A., nauchnyy sotrudnik; TEODOROVICH, V.P., starshiy nauchnyy sotrudnik

Experimental studies on the reproduction and prevention of gastric ulcer in dogs. Akt.vop.perel.krovi no.7:228-242 '59. (MIRA 13:1)

1. Chlen-korrespondent AMN SSSR (for Filatov).
(PEPTIC ULCER) (CINCHOPHEN)

FILATOV, A.N., prof. (Leningrad, ul.Nekrasova, d.60, kv.131); SENCHILO, Ye.A., kand.med.nauk

Late results of vagotomy in peptic ulcer of the stomach and duodenum. Vest.khir. 82 no.4:50-55 Ap '59. (MIRA 12:6)

1. Iz khirurgicheskoy kliniki (zav. - prof.A.N.Filatov) Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta peralivaniya krovi. 2. Chlen-korrespondent AMN SSSR (for Filatov).
(VAGUS NERVE--SURGERY) (PEPTIC ULCER)

FILATOV, A.N., professor (Leningrad)

Twenty-five points for the prevention of posttransfusion complications for physicians of medical institutions. Vest.khir. 83 no.11:123-125 N '59. (MIRA 13:4)

1. Chlen-korrespondent AMN SSSR.
(BLOOD TRANSFUSION complications)

FILATOV, A.N., prof.

"Acute appendicitis." Reviewed by A.N. Filatov. Vest.khir. 83 no.12:101-103 D '59. (MIRA 13:5)

1. Chlen-korrespondent AMN SSSR, Leningrad.
(APPENDICITIS)

FILATOV, A. N., (prof.)
-- Leningrad

"Surgery on Arteries in Thromboembolic Diseases of Lower Extremities."

Report submitted for the 27th Congress of Surgeons of the USSR, Moscow, 23-28 May 1960.

FILATOV, Antonin Nikolayevich, prof., zasl. deyatel' nauki RSFSR; BERINGER, Yu.V.; GOLOVIN, G.V.; MEDVEDEV, P.M.; MIKHAYLOV, S.S., red.; SHEVCHENKO, F.Ya., tekhn. red.

[Transplantation and replacement of tissues and organs] Peresadki i zameshcheniia tkanei i organov. Leningrad, Gos. izd-vo med. lit-ry Medgiz, Leningr. otd-nie, 1960. 323 p. (MIRA 14:7)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Filatov)
(TRANSPLANTATION OF ORGANS, TISSUES, ETC.)

ANICHKOV, M.N., dots.; ANTELAVA, N.V., prof.; BISENKOV, N.P., kand. med. nauk; BOGUSH, L.K., prof.; GRIGOR'YEV, M.S., prof.; DYSKIN, Ye.A., kand. med. nauk; KEVESH, Ye.L., prof.; KOLESOV, A.P.; KOLESOV, V.I., prof.; KUPRIYANOV, P.A., prof.; LINBERG, B.E., prof.; MAKSIMENKOV, A.N., prof.; OSIPOV, B.K., prof.; SAVITSKIY, A.I., prof.; UVAROV, B.S.; UGLOV, F.G., prof.; KHOLDIN, S.A., prof.; PETROVSKIY, B.V., prof., otv. red.; BAKULEV, A.N., akademik, red.; GULYAYEV, A.V., prof., red.; YEGOROV, B.G., prof., red.; PANKRAT'YEV, B.Ye., prof., red.; PYTEL', A.Ya., prof., red.; RIKHTER, G.A., prof., red.; FILATOV, A.N., prof., red.; CHAKLIN, V.D., prof., red.; RYBUSHKIN, I.N., doktor med. nauk, red.; RULEVA, M.S., tekhn. red.

[Multivolume manual on surgery] Mnogotomnoe rukovodstvo po khirurgii. Moskva, Medgiz. Vol.5. [Chest surgery; thoracic wall, pleura, and lungs] Khirurgiia grudi; grudnaia stenka, plerva i legkie. 1960. 727 p. (MIRA 15:3)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Antelava, Bogush, Maksimenkov, Savitskiy, Kholdin, Chaklin).
2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Kupriyanov, Petrovskiy, Yegorov).

(CHEST--SURGERY)

AMINEV, A.M., prof.; BEREZOV, Ye.L., prof.; BISENKOV, N.P., kand. med. nauk; BRAYTSEV, V.R., prof.; DEYNEKA, I.Ya., prof.; DYSKIN, Ye.A., kand. med. nauk KAZANSKIY, V.I., prof.; KARAVANOV, G.G., prof.; LEVIN, M.M., prof.; MAKSIMENKOV, A.N., prof.; MAYAT, V.S., prof.; NAPALKOV, P.N., prof.; ROZANOV, B.S., prof.; RUSANOV, A.A., prof.; RUSANOV, G.A., kand. med. nauk; FILATOV, A.N., prof.; CHUKHRIYENKO, D.P., prof.; SHILOVTSEV, S.P., prof.; PETROVSKIY, B.V., prof., otv. red.; MEL'NIKOV, A.V., prof., red. toma; SUVOROVA. T.A., dots., red.; MIROTVORTSEVA, K.S., red.; RULEVA, M.S., tekhn. red.

[Multivolume manual on surgery] Mnogotomnoe rukovodstvo po khirurgii. Moskva, Medgiz. Vol.7. [Surgery of the abdominal wall and organs of the abdominal cavity, the stomach and intestines] Khirurgiia briushnoi stenki, organov briushnoi polosti-zheludka i kishechnika. 1960. 746 p. (MIRA 15:3)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Braytsev, Petrovskiy, Mel'nikov). 2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Maksimenkov, Filatov).
(ABDOMEN—SURGERY)

FILATOV, A.N., prof.; DEPP, M.Ye.

Analysis of the clinical observations on treatment of diseases of the hematopoietic system by splenectomy. Probl.gemat.i perel.krovi 5 no.1:17-21 Ja '60. (MIRA 14:6)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni instituta perelivaniya krovi (dir. - dotsent A.V.Belyakov) 2. Chlen-korrespondent AMN SSSR (for Filatov).
(HEMATOPOIETIC SYSTEM—DISEASES) (SPLEEN—SURGERY)

FILATOV, A.N., prof. (Leningrad)

Current status of the problem of blood substitutes. Sov.med. 24 no.12:74-81 D '60. (MIRA 14:3)

1. Chlen-korrespondent AMN SSSR.
(BLOOD PLASMA SUBSTITUTES)

FILATOV, A.N., prof.; BERINGER, Yu.V., doktor med.nauk (Leningrad)

Errors and hazards in operations on thrombosed veins. Khirurgiia 36 no.9:3-7 S '60. (MIRA 13:11)

(THROMBOSIS)

FILATOV, A.N., prof.; ESBERG, N.A.

New methods of using cadaveric blood. Vest.khir. no.10:39-45 '61. (MIRA 14:10)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi (nauchnyy rukovod. - prof. A.N. Filatov). Adres avtorov: Leningrad, 2-ya Sovetskaya 16. Institut perelivaniya krovi.

(BLOOD AS FOOD OR MEDICINE) (CADAVERS)

FILATOV, A.N., prof.; KARTASHEVSKIY, N.G.; MEL'NIKOVA, V.N.; SOBOLEV, V.K. (Leningrad)

Possibility of utilizing a cadaver lung as a dialyzing system in renal insufficiency instead of the artificial kidney; experimental study. Pat. fiziol. i eksp. terap. 6 no.3:49-52 My-Je'62 (MIRA 17:2)

1. Iz laboratorii konservirovaniya i peresadki tkaney Leningradskogo nauchno-issledovatel'skogo instituta perelivaniya krovi (nauchnyy rukovoditel' instituta - chlen-korrespondent AMN SSSR, zasluzhennyy deyatel' nauki prof. A.N. Filatov, direktor - dotsent A.D. Belyakov).

PETROV, Ioakim Romanovichprof.; FILATOV, Antonin Nikolayevich, zasl. deyatel' nauki, prof.; Prinimali uchastiye: BOGOMOLOVA, L.G., prof.; BONDINA, V.A., st. naychnyy sotr.; DEPP, M.Ye.; CHAPLYGINA, Z.A.; SEMENOVA, Ye.A.; SARKISOV, M.A., red.; ONOSHKO, N.G., tekhn. red.

[Plasma substituing solutions] Plazmozameshchaiushchie rastvory. Izd. 2. Leningrad, Medgiz, 1963. 246 p. (MIRA 16:7)

1. Deystvitel'nyy chlen AMN SSSR (for Petrov). 2. Chlen-korrespondent AMN SSSR (for Filatov). 3. Zaveduyushchiy nauchnoy bibliotekoy Leningradskogo instituta perelivaniya krovi (for Semenova).

(BLOOD PLASMA SUBSTITUTES)

FILATOV, Antonin Nikolayevich; KOTOVSHCHIKOVA, Marianna Aleksandrovna; KULESHOV, Yu.Ya., red.; KHARASH, G.A., tekhn. red.

[Coagulative system of the blood in clinical practice] Svertyvaiushchaia sistema krovi v klinicheskoi praktike. Leningrad, Medgiz, 1963. 159 p. (MIRA 16:9)
(BLOOD--COAGULATION)

FILATOV, A.N., zasluzhennyy deyatel' nauki, prof. (Leningrad)

"Surgery of blood system diseases" by D.M. Grozdov, M.D.Patsiora. Reviewed by A.N.Filatov. Vest. khir. 70 no.6:142-143 Je-'63 (MIRA 16:12)

1. Chlen-korrespondent AMN SSSR.

FILATOV, A.N., prof. (Leningrad, ul. Nekrasova, d. 60, kv. 131); LITMANOVICH, K. Yu., kand. med. nauk; AKHVERDYAN, R.A.

Methodology of intimothrombectomy in thromboses of arteries of the lower extremities. Vestn. khir. Grekov. 90 no.4:27-34 Ap'63 (MIRA 17:2)

1. Iz khirurgicheskoy kliniki (zav. - prof. A.N. Filatov) Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi.

AKULOVA, R.F., prof.; ANTELAVA, N.V., prof.; AR'YEV, T.Ya., prof.; BAIROV, G.A., prof.; VELIKORETSKIY, A.N., prof.; GABAY, A.V., prof. [deceased]; GILORYBOV, G.Ye., prof.; DOBROVOL'SKIY, V.K., prof.; DOLINA, O.A., kand. med. nauk; ZATSEPIN, T.S., prof.; KIRICHINSKIY, A.R., prof.; KOZLOVA, A.V., prof.; KOTOV, A.P., prof.; KRAKOVSKIY, N.I., prof.; KUZIN, M.I., prof.; L'VOV, A.N., prof. [deceased]; MITYUNIN, N.K., kand. med. nauk; MTVARELIDZE, Sh.I., prof., [deceased]; NOVACHENKO, N.P., prof., zasl. deyatel' nauki USSR; OSIPOV, B.K., prof.; PIKIN, K.I., prof.; POSTNIKOV, B.N., prof.; RAKOV, A.I., prof.; STRUCHKOV, V.I., zasl. deyatel' nauki RSFSR, prof.; FAYERMAN, I.L., prof. [deceased]; FILATOV, A.N., prof.; SHMELEV, I.V., prof. [deceased]; PETROVSKIY, B.V., zasl. deyatel' nauki RSFSR, prof., otv. red.

[Multivolume manual on surgery] Mnogotomnoe rukovodstvo po khirurgii. Moskva, Meditsina. Vol.2. 1964. 771 p. (MIRA 18:1)

1. Deystvitel'nyy chlen AMN SSSR (for Antelava, Petrovskiy).
2. Chlen-korrespondent AMN SSSR (for Bairov, Novachenko, Struchkov, Filatov).

FILATOV, A.N., prof.

Blood circulation disorders in extremities following intra-arterial blood transfusion. Khirurgiia 40 no.4:50-55 Ap '64
(MIRA 18:1)

FILATOV, Antonin Nikolayevich; BOGOMOLOVA, Lyubov' Grigor'yevna; ANDRIANOVA, Irina Gennad'yevna; KULESHOV, Yu.Ya., red.;

[Dryed blood plasma and its use for therapeutic purposes] Sukhaia plazma krovi i ee primenenie s lechebnoi tsel'iu. Leningrad, Meditsina, 1964. 142 p. (MIRA 18:1)

FILATOV, Antonin Nikolayevich, zasl. deyatel' nauki prof., red.; SARKISOV, M.A., red.

[Manual on the use of blood and blood substitutes] Rukovodstvo po primeneniiu krovi i krovezamenitelei. Leningrad, Meditsina, 1965. 559 p. (MIRA 18:7)

1. Chlen-korrespondent AMN SSSR (for Filatov).

AKRAMOV, Sh.I., prof.; BAIROV, G.A., prof.; BLINOV, N.I., prof.; GADZHIYEV, S.A., prof.; GODUNOV, S.F., prof.; GOMZYAKOV, G.A., prof.; DEMIN, V.N., prof.; ZVORYKIN, I.A., prof.; KAPITSA, L.M., kand. med. nauk; MOKROVSKAYA, S.P., kand. med. nauk; POSTNIKOV, B.N., prof.; PORKSHEYAN, O.Kh., prof.; SIDORENKO, L.N., kand. med. nauk; TAL'MAN, I.M., prof.; FEDOROVA, A.D., kand. med. nauk; FILATOV, A.N., prof.; KHROMOV, B.M., prof.; SARKISOV, M.A., red.

[Errors, hazards and complications in surgery] Oshibki, opasnosti i oslozhneniia v khirurgii. Leningrad, Meditsina, 1965. 563 p. (MIRA 18:7)

FILATOV, A.N.

Role of chemistry in the solution of hematological problems.
Vest. AMN SSSR. no.4:64-73 '64. (MIRA 18:8)

1. Leningradskiy nauchno-issledovatel'skiy institut perelivaniya krovi Ministerstva zdravookhraneniya RSFSR.

L 9729-66 EWT(d) IJP(c)

ACC NR: AP5028905 SOURCE CODE: UR/0020/65/165/003/0490/0492

AUTHOR: Filatov, A. N.

ORG: Institute of Mechanics and Computing Center of the Academy of Sciences, UzbSSR (Institut mekhaniki i vychislitel'nyy tsentr Akademii nauk UzbSSR)

TITLE: On the method of averaging in systems of integro-differential equations

SOURCE: AN SSSR. Doklady, v. 165, no. 3, 1965, 490-492

TOPIC TAGS: integro differential equation, averaging method, averaged equation, differential equation system

ABSTRACT: The method of averaging for systems of differential equations developed by N. N. Bogolyubov, Yu. A. Mitropol'skiy, and others is generalized to the system of integro-differential equations of the form

$$\frac{dx}{dt} = \varepsilon X(t, x) + \varepsilon \int_0^t Z(t, x(s), s)\, ds, \qquad (1)$$

where $\varepsilon > 0$ is a small parameter, x is an n-dimensional vector and X and Z are real vector-functions continuous for all t and s on the interval $(0, +\infty)$ and for all $x \in E_n$ (E_n is n-dimensional Euclidean space). The averaged integro-differential equation is written with the assumption that X and Z can be averaged with respect to t

Card 1/2 UDC: 517.948

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and s, respectively. Under certain additional conditions upon functions X and Z, a theorem is proved that the absolute value of the difference between the solutions of systems (1) and the solutions of the averaged system can be made smaller than any small positive number η. When function Z can be averaged with respect to t, then it is shown that the obtained system of averaged integro-differential equations can be reduced to a system of differential equations. Orig. art. has: 5 formulas. [LK]

SUB CODE: 12/ SUBM DATE: 12Apr65/ ORIG REF: 004/ ATD PRESS: 4157

Card 2/2

PLATOV, A.N.

Some classes of operator series and their applications. Vop. vych. mat. i mekh. no.4:63-65 '64. (MIRA 18:12)

FILATOV, A.N.; YAKOVLEV, G.Ya.

Experimental transplantation of an intact spleen for the purpose of overcoming tissue incompatibility. Pat. fiziol. i eksp. terap. 9 no.1:34-40 Ja-F '65. (MIRA 18:11)

1. Leningradskiy nauchno-issledovatel'skiy institut perelivaniya krovi (direktor A.D. Belyakov; nauchnyy rukovoditel' instituta-chlen-korrespondent AMN SSSR prof. A.N. Filatov).

ACCESSION NR: AR4039842 S/0044/64/000/004/B088/B088

AUTHOR: Filatov, A. N.

TITLE: On a method of solution of the Cauchy problem for the dynamic equations of elasticity theory.

SOURCE: Ref. zh. Matematika, Abs. 4B385

TOPIC TAGS: Cauchy problem, dynamic equation, elasticity theory, solution

TRANS: explicit form is obtained for the solution of the Cauchy problem for the LYAME (Abstractor's note: LAME') equation:

$$u=\sum_{n=0}^{\infty}\frac{t^{2n}}{(2n)!}(\alpha\,\mathrm{grad}\,\mathrm{div}-\beta\,\mathrm{rot}\,\mathrm{rot})^n\varphi+$$
$$+\sum_{n=0}^{\infty}\frac{t^{2n+1}}{(2n+1)!}(\alpha\,\mathrm{grad}\,\mathrm{div}-\beta\,\mathrm{rot}\,\mathrm{rot})^n\psi,$$

Card 1/2

ACCESSION NR: AR4039842

where $\varphi = u|_{t=0}$, $\psi = \frac{\partial u}{\partial t}\Big|_{t=0}$. If the LYAME operator has a dispension term, the operator under the summation sign is replaced by $\alpha\,\mathrm{graddiv} - \beta\,\mathrm{rot} - \gamma$. It is remanced that by the same method one can also study the case of the non-homogeneous LYAME equation. The solution is obtained through the use of LI (Abstractor's note: LIE) series, the convergence is established by the majorant method. The series found converge for a finite time interval I. Arzhany*kh.

ASSOCIATION: none

SUB CODE: MA DATE ACQ: 15May64 ENCL: 00

Card 2/2

L 35999-66 EWT(d)/T IJP(c)

ACC NR: AR6004023 SOURCE CODE: UR/0044/65/000/009/B036/B037

AUTHOR: Filatov, A. N.

TITLE: Certain classes of operator series and their applications

SOURCE: Ref. zh. Matematika, Abs. 9B168

REF SOURCE: Sb. Vopr. vychisl. matem. i tekhn. Vyp. 4. Tashkent, 1964, 3-165

TOPIC TAGS: linear differential operator, convergent series, complex function, ordinary differential equation, partial differential equation, motion equation, Cauchy problem

ABSTRACT: An extensive article is devoted to the properties and applications of series of the following special form (the author calls these operator series)

$$\sum \frac{1}{s!}\left(\sum_{r=1}^{m} \psi_r L_r\right)^s f,$$

where $\psi_1, \ldots, \psi_m, f$ are holomorphic functions of the complex variables $t_1, \ldots, t_m$, $z_1, \ldots, z_n$, and $L_1, \ldots, L_m$ are linear differential operators of the form

$$L_r = \sum_{\nu=1}^{m} \varphi_{r\nu} \frac{\partial}{\partial t_\nu} + \sum_{\mu=1}^{n} \psi_{r\mu} \frac{\partial}{\partial z_\mu},$$

where $\varphi_{r\nu}, \psi_{r\mu}$ are holomorphic functions of the variables $t_m, z_1, \ldots, z_n$. The

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Card 1/2

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ACC NR: AR6004023

conditions for convergence of the series of the considered form and their analytic properties are studied. Applications of operator series to differential equations (ordinary as well as in partial derivatives) and to the equations of motion of mechanical systems are given. The problem of the motion of a rigid body about a fixed point is studied in particular detail. Integrals of the problem are obtained in all known cases of integration. The solution of the Cauchy problem is given for the equations of motion of a rigid body about a fixed point. The problem of the motion of a gyrostat is considered. Bibliography of 44 citations. V. Kirgetov [Translation of abstract]

SUB CODE: 12, 20

Card 2/2

FILATOV, A. N.

124-11-12514

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p. 29 (USSR)

AUTHOR: Filatov, A. N.

TITLE: On Helical Motions of a Compressible Fluid.
(O vintovykh dvizheniyakh szhimayemoy zhidkosti)

PERIODICAL: Dokl. A. N UzSSR, 1957, Nr 2, pp 3-7

ABSTRACT: An analysis of a steady flow of an ideal fluid in barotropic conditions, when the streamline follows vortex lines and the following relationship obtains:

$$\text{rot } \underline{v} = k \rho \underline{v}$$

where k is a constant, ρ is the density, and $\underline{v}$ is the velocity vector.

A solution is sought for the integral of the equation of motion, written for curvilinear right-angle coordinates, under the assumption that the flow depends on only one coordinate, yielding solutions in two special cases: 1) the Lamé parameters satisfy the condition $H_1^2 = H_2^2$; 2) the differential equations assume the form of the equations of motion of a compressible gas in adiabatic processes in a system of cylindrical coordinates.

D. Ye. Dolidze

Card 1/1

SOV/124-58-5-5320

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 51 (USSR)

AUTHOR: Filatov, A.N.

TITLE: On Helical Flow Patterns in an Infinite Space (O vintovykh potokakh v neogranichennom prostranstve)

PERIODICAL: Izv. AN UzbSSR, Ser. fiz-matem. n., 1957, Nr 2, pp 5-19

ABSTRACT: An examination is made of the problems of the stationary helical motion of an ideal fluid in an infinite space. In the case of an incompressible fluid the velocity vector satisfies the equations

$$\text{rot } v = \lambda v, \quad \text{div } v = 0$$

wherein λ is a scalar function. Using the well-known method for determining the velocity due to a given vortex in an infinite space, the author obtains for v a homogeneous integral equation with a triple integral for the infinite space, and he proves the theorem that, if the velocity at infinity diminishes at a rate not less than $1/R^3 (R \to \infty)$, the helical motion does not exist if $\lambda = \text{const}$. The theorem is extended also to the general case of an ideal barotropic fluid. Also examined are the equations

$$\text{rot } v = kv + \omega, \quad \text{div } v = 0 \qquad (1)$$

Card 1/2

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On Helical Flow Patterns in an Infinite Space

wherein k is a constant, and ω and θ are given functions. The uniqueness of v is demonstrated for cases in which

$$| v R^{2+\mu} |, \quad 0 < \mu < 1$$

are finite and the solution of equations (1) reduces to a heterogeneous integral equation in which

$$| v R^{2+\mu} |, \quad | \omega R^{2+\mu} |, \quad | \theta R^{2+\mu} |$$

are finite. The solution of the integral equation thus obtained is set up in an explicit form. The article concludes with a generalization of the results attained for a system of equations of type (1).

D.Ye. Dolidze

1. Fluid flow--Mathematical analysis

Card 2/2

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Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 53 (USSR)

AUTHOR: Filatov, A. N.

TITLE: Some Instances of Helical Motion of an Incompressible Fluid (Nekotoryye sluchai vintovogo dvizheniya neszhimayemoy zhidkosti)

PERIODICAL: Dokl. AN UzbSSR, 1957, Nr 4, pp 3-8

ABSTRACT: The equations of a stationary motion of an incompressible fluid when the streamlines coincide with the vortex lines may be expressed in vector form as follows:

$$\text{rot } v = \lambda v, \qquad (v \text{ grad } \lambda) = 0$$

where v is the velocity vector, maintaining at the same time the condition of incompressibility: div v = 0. When the velocity v is known, the pressure may be determined by the Bernoulli equation. Considering λ = const, the author offers several possible special solutions of the problem by transformation of the equations to spherical, paraboloidal, and ellipsoidal coordinates. The paper further points to

Card 1/2

FILATOV, A.N.

Helical motion of a barotropic liquid. Trudy Inst. mat. i mekh. AN Uz. SSR no.21:97-106 '57. (MIRA 11:6)
(Hydrodynamics) (Differential equations)

FILATOV, A.N.

Dynamic effect of a liquid on a tank subjected to random longitudinal acceleration. Trudy Inst. mat. i mekh. AN Uz. SSR no.21:107-111 '57. (MIRA 11:6)

(Hydrodynamics) (Tanks)

FILATOV, A.N., Cand Phys Math Sci -- (diss) "Concerning helical fluxes and related systems of differential equations." Tashkent, Pub House of Acad Sci UzSSR, 1958, 12 pp (Acad Sci UzSSR. Inst of Math and Mechanics im V.I. Romanovskiy) 150 copies . Bibliography at end of text (10 titles) (KL, 23-58, 101)

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A060/A000

AUTHORS: Baimbetov, K.K., Filatov, A.N.

TITLE: On a high-speed problem without switching for linear systems

PERIODICAL: Referativnyy zhurnal, Matematika, no. 9, 1962, 44, abstract 9V234 ("Tr. Mekhan.-matem. fak. Kazakhsk. un-t", 1960, v. 1, no. 2, 287 - 294)

TEXT: In the first part of the paper the following problem is posed for a linear, controlled system of the form

$$x^i = \sum_{j=1}^{n} a_{ij} x^j + b_i u(t), \quad i = 1, 2, \ldots, n, \qquad (1)$$

where a_{ij}, b_i are constants, and $u(t)$ is a piecewise-continuous function constrained by the constrained by the condition $|u(t)| \leq M$. To find the conditions which have to be imposed upon the system (1) so that the representative point of that system can travel from any preimposed point $x_0 = (x_0^1, \ldots, x_0^n)$ of the phase-space to the manifold $a_1 x^1 + \ldots + a_n x^n + a_{n+1} = 0$, where a_1 are ar-

Card 1/3

On a high-speed problem without switching for ....

bitrary constants, in a minimum time without switching of the control action u (t) from one limiting value to another. The case n = 2 and the case of n - arbitrary are considered in turn. In the latter case the following theorem is proved, which gives sufficient conditions for the solution of the problem posed. If the matrix of the system (1) has the form:

$$A = \begin{pmatrix} a_{11} & 0 & 0 & 0 & \cdots & 0 \\ a_{21} & a_{22} & 0 & 0 & \cdots & 0 \\ a_{31} & a_{32} & a_{33} & 0 & \cdots & 0 \\ \cdot & \cdot & \cdot & \cdot & \cdots & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdots & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdots & \cdot \\ a_{n1} & a_{n2} & a_{n3} & \cdot & \cdots & a_{nn} \end{pmatrix},$$

where a_{ij} are distinct real numbers, then the travel from an arbitrary point of an n-dimensional phase-space to the manifold $x^1 = 0$ is always possible in a minimum time without switching (provided, of course, there is an admissible direction leading the phase point to the required manifold). If the manifold is given by the equation

$$\sum_{i=1}^{n} a_i x^i + a_{n+1} = 0 ,$$

Card 2/3