

CHUKHNC, --- (Continued) Card 2.

(for Rozenman). 14. Armyskiy sel'skokhozyaystvennyy institut  
(for Vartanyan). 15. Permskiy politekhnicheskiy institut (for  
Novikov). 16. Galen-korrespondent Akademii nauk SSSR, glavnyy  
redaktor zhurnala "Voprosy ekonomiki" (for Gatovskiy).  
(Economics--Study and teaching)

VOLKOV, M.I., dots.; KOROLEV, S.A.; LOPATKIN, V.G., dots.; TOKAREV, A.P.;  
KOZLOVA, G.A., prof., red.; KOKOSHKO, A.G., red.; MARTYNOVA,  
M.N., tekhn. red.

[Socialist means of production] Sotsialisticheskii sposob  
proizvodstva. Moskva, Izd-vo "Mysl'." No.3. [Funds of  
socialist enterprises and the formation of net income in a  
socialist enterprise] Fondy sotsialisticheskikh predpriatii  
i obrazovanie chistogo dokhoda v sotsialisticheskom khoziai-  
stve. 1964. 186 p. (MIRA 17:4)

1. Kommunisticheskaya Partiya Sovetskogo Soyuz. Vysshaya  
partiynaya shkola. Kafedra politicheskoy ekonomii.

L 22230-66 EWT(1)/EWT(m)/T

SOURCE CODE: UR/0056/66/050/003/0660/0671

ACC NR: AP6010987

AUTHOR: Barbashov, B. M.; Volkov, M. K.

35  
8

ORG: Joint Institute of Nuclear Studies (Ob" yedinennyy institut yadernykh issledovaniy)

2)

TITLE: Investigation of infrared singularities of the scattering cross section by the functional integration method

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 3, 1966, 660-671

TOPIC TAGS: photon, virtual photon, Fermi particle, scattering cross section, functional integration, photon emission 19

ABSTRACT: Mutual scattering of high-energy scalar particles of mass m is studied by the functional integration method. The process is treated on the basis of the scalar particle model with a Lagrangian  $L = g:\psi^2(x)\phi(x)$ : where the field  $\psi(x)$  has a mass  $m$  and  $\phi(x)$  has a zero mass. The contribution of virtual photons of field  $\phi(x)$  with  $k^2 = 0$ , which leads to infrared divergence in the amplitude of the elastic process, is taken into account. A procedure for compensating infrared divergences is developed outside the framework of perturbation theory by taking into account in the cross section processes which involve the emission of an infinite number of real photons from field  $\phi(x)$  with a total energy of photons not exceeding a certain quantity  $\Delta$ . [CS]

SUB CODE: 20/ SUBM DATE: 07Aug65/ ORIG REF: 003/ OTH REF: 001/

Card 1/1 nat

VOLKOV, M.K.; YEFIMOV, G.V.

Analytic properties of amplitudes in the second order of  
nonlinear field theory. Zhur. eksp. i teor. fiz. 47 no.5:  
1800-1805 N '64. (MIRA 18:2)

1. Ob'yedinennyy institut yadernykh issledovaniy.

L 4584-66 ENT(1)

ACCESSION NR: AP5020267

UR/0367/65/002/001/0171/0179 *SE*

AUTHOR: Volkov, M. K. *ull, cc*

TITLE: A two-dimensional relativistic model of quantum field theory without ultraviolet divergences *31.11.55*

SOURCE: Yadernaya fizika, v. 2, no. 1, 1965, 171-179

TOPIC TAGS: Green function, spinor, quantum field theory, analyticity, relativistic quantum mechanics

ABSTRACT: The polarization operator and the scalar and spinor Green's functions are investigated in the two-dimensional case with the Bialynicki-Birula Lagrangian (Nucl. Phys. v. 12, 309, 1959). The calculations are made in second order in the differences of the nuclear masses in the two possible states,  $\Delta m_0$ . Corrections to the Green's functions proportional to  $(\Delta m_0)^4$  are derived and it is shown that the theory is finite also in this order. The model employed is shown to

L 458h-66

ACCESSION NR: AP5020267

15

be free of ultraviolet divergences and to satisfy all the requirements for a consistent closed theory, leading to finite mass renormalization. The Green's functions have the correct analytic properties. Amplitudes for multiple production of particles can be estimated even in low order of  $\Delta m$ . The author thanks G. V. Yefimov<sup>///</sup> and B. M. Barbashov<sup>/// 55</sup> for suggesting the topic and for discussions, and Professor D. I. Blokhintsev<sup>///</sup> and Academician N. N. Bogolyubov<sup>/// 55</sup> for interest in the work and valuable suggestions. Orig. art. has: 3 figures and 40 formulas

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Institute of Nuclear Research)  
 4/55

SUBMITTED: 17Jan65

ENCL: 00

SUB CODE: GP

NR REF SOV: 004

OTHER: 003

cont 2/2

24,6400

45333  
S/020/63/148/004/012/025  
B102/B186

AUTHORS: Volkov, M. K., Veresh, T.

TITLE: Consideration of superfluidity effects in alpha decay to the vibrational levels of the daughter nuclei

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 4, 1963, 799-802

TEXT: V. G. Solov'yev (DAN 144, no. 6, 1962) has developed a superfluidity theory of  $\alpha$ -decay and has shown that taking account of pair correlation improves the agreement between experiment and theory. This method is now used for the case of  $\alpha$ -decay to collective levels. For describing the quadrupole-quadrupole interaction of nonspherical nuclei the Hamiltonian of Zaretskiy and Urin (ZhETF, 41, 898, 1961) is applied. Neutron-proton correlation is taken into account according to Birbraur (ZhETF, 42, 479, 1962). On  $\alpha$ -decay an even-even parent nucleus is assumed to go over from its ground state  $\psi_0(N, Z)$  to a vibrational state  $\psi'_k(N-2, Z-2)$ , so that

+

Card 1/5

Consideration of superfluidity ...

S/O20/63/148/004/012/025  
B102/B186

$$M = \psi_{\lambda} (N - 2, Z - 2) A \psi_0 (N, Z), \quad (1)$$

$$A = \frac{1}{4} \sum_{(\nu, \mu, r, \sigma)} W_{r_1 r_2 \sigma_1 \sigma_2} (\rho \nu_1 \nu_2 / n \mu_1 \mu_2) a_{p \nu_1 r_1} a_{p \nu_2 r_2} a_{n \mu_1 \sigma_1} a_{n \mu_2 \sigma_2} \quad (2)$$

$$\psi_0 = \prod_{s, t} (u_{t, s} + v_{t, s} a_{t s +}^{\dagger} a_{t s -}^{\dagger}) \psi_0; \quad (3)$$

✓

$a$  are the nucleon absorption operators,  $(r, \sigma) = \pm 1$ ,  $t$  is the isotopic index and  $\psi_0$  the vacuum function; the  $(\nu, \mu)$  summation is to be carried out over all single-particle levels. The nucleon Hamiltonian in the axisymmetric deformed potential when taking pair and quadrupole interactions into account is

Card 2/5



Consideration of superfluidity ...

S/O20/63/148/004/012/025  
B102/B186

$$H = H_0 + H_Q; \tag{4}$$

$$H_0 = \sum_{i,v} \epsilon_{i,v} (a_{i,v+}^\dagger a_{i,v+} + a_{i,v-}^\dagger a_{i,v-}) - G \sum_{i,v'} a_{i,v'}^\dagger a_{i,v'-} a_{i,v'+}; \tag{4a}$$

$$H_Q = - \frac{\kappa}{2} \sum_{\nu, \nu', \lambda, \lambda', \lambda_1, \lambda_1'} (q_{2\nu})_{\alpha\lambda} (q_{2\nu'})_{\beta\lambda'} a_{i\nu}^\dagger a_{i\nu'}^\dagger a_{i\nu} a_{i\nu'}; \tag{4\sigma}$$

and for the state of the daughter nucleus Yoshida's expression

$$\Psi_k = \sum_{i\lambda\lambda'} \tilde{f}_{i\lambda\lambda'}^{(k)} A_{i\lambda\lambda'} \Psi_0; \tag{5}$$

is taken (Phys. Rev. 123, 2122, 1961).  $\epsilon_{i\nu}$  is the single particle energy counted from the Fermi level,  $q_{2\mu} = r^2 Y_{2\mu}$ . From (2), (3) and (5) for (1) an explicit expression for  $M_k$  is obtained. In the case of  $\mu$  or  $\beta$

Card 3/5

S/O20/63/148/004/012/025  
 B102/B186

Consideration of superfluidity ...

vibrations ( $\lambda \neq \lambda'$  or  $\lambda = \lambda'$ ) somewhat simpler expressions are obtained for  $M_\alpha$  and  $M_\beta$ . Therefrom the forbiddenness of an  $\alpha$ -decay to a  $\beta$ -vibrational level  $F = M_\alpha^2 / M_\beta^2$  is determined:

$$\begin{aligned}
 F = & \sum_{\lambda} \left[ \frac{|q_{20}|_{\rho\lambda\lambda}^2 \Delta_{\rho}''}{E'_{\rho\lambda} (2E'_{\rho\lambda} - \hbar\omega_{\beta})^2} + \frac{|q_{20}|_{n\lambda\lambda}^2 \Delta_n''}{E'_{n\lambda} (2E'_{n\lambda} - \hbar\omega_{\beta})^2} \right] \times \\
 & \times \left\{ \sum_{\lambda', \nu} \frac{(q_{20})_{\rho\lambda\lambda'} \Delta_{\rho}'}{E'_{\rho\lambda} (2E'_{\rho\lambda} - \hbar\omega_{\beta})} \frac{[(1 - \delta_{\lambda,\nu}) u'_{\rho\nu} v_{\rho\nu} (u'_{\rho\lambda} v_{\rho\lambda} - v'_{\rho\lambda} u_{\rho\lambda}) - \delta_{\lambda,\nu} u'_{\rho\lambda} v_{\rho\lambda}]}{\left[ \sum_{\nu'} v_{\rho\nu} u'_{\rho\nu} \prod_{l \neq \nu} (u'_{\rho l} u_{\rho l} + v'_{\rho l} v_{\rho l}) \right]} \right\} \quad (14). \\
 & \times \prod_{l \neq \lambda, \nu} (u'_{\rho l} u_{\rho l} + v'_{\rho l} v_{\rho l}) + \sum_{\lambda', \nu} \frac{(q_{20})_{n\lambda\lambda'} \Delta_n'}{E'_{n\lambda} (2E'_{n\lambda} - \hbar\omega_{\beta})} \times \\
 & \times \frac{[(1 - \delta_{\lambda,\nu}) u'_{n\nu} v_{n\nu} (u'_{n\lambda} v_{n\lambda} - v'_{n\lambda} u_{n\lambda}) - \delta_{\lambda,\nu} u'_{n\lambda} v_{n\lambda}]}{\left[ \sum_{\nu'} v_{n\nu} u'_{n\nu} \prod_{l \neq \nu} (u'_{n l} u_{n l} + v'_{n l} v_{n l}) \right]} \prod_{l \neq \lambda, \nu} (u'_{n l} u_{n l} + v'_{n l} v_{n l}) \}^{-2}.
 \end{aligned}$$

Card 4/5

Consideration of superfluidity ...

S/020/63/148/004/012/025  
B102/B186

$M^0$  refers to a decay to the ground state. For the  $\alpha$ -decay of  $U^{234}$ ,  $Pu^{238}$ , and  $Cm^{242}$   $F$  is calculated and compared with experimental data. The theoretical results are higher (Pu,Cm) or lower (U) than the experimental ones. Nevertheless the agreement is said to be satisfactory. There is 1 table. X

ASSOCIATION: Ob"yedinennyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

PRESENTED: August 6, 1962, by N. N. Bogolyubov, Academician

SUBMITTED: June 19, 1962

Card 5/5

VOLKOV, M.K.

Effect of various methods of introducing the fundamental length into the results of calculations. Vest. Mosk. un. Ser. 3: Fiz., astron. 15 no. 6:81-86 N-D '60. (MIRA 14:5)

1. Kafedra statisticheskoy fiziki i mekhaniki Moskovskogo gosudarstvennogo universiteta.  
(Quantum field theory) (Mesons)

L 16101-65 ENT(1) ESD(gs)/ESD(t)/SSD/AFRL/ASD(p)-3  
ACCESSION NR: AP5000335 S/0056/64/047/005/1800/1805

AUTHORS: Volkov, M. K.; Yefimov, G. V.

TITLE: Analytic properties of amplitudes in second order in non-linear field theory <sup>6</sup>

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 5, 1964, 1800-1805 <sup>21</sup>

TOPIC TAGS: field theory, perturbation theory, nonlinear theory, unitarity, causality

ABSTRACT: Continuing earlier efforts by one of the authors (Yefimov, ZhETF v. 44, 2017, 1963) to construct a finite local theory of the scalar field by introducing an essentially nonlinear interaction Lagrangian satisfying definite requirements, the authors investigate the amplitudes of the processes in second order of perturbation theory in the physical region of the momenta. The unitarity of the

Card 1/2

L 16101-65

ACCESSION NR: AP5000335

2

theory is proved in this order. An analysis of the asymptotic behavior of the imaginary parts of the amplitudes for large values of the momenta and for high energies indicates that only a study of the higher approximations of the perturbation theory can yield complete information on the processes. However, the behavior of the amplitudes as obtained in the presented nonlinear theory agrees with causality theory, at least in second order of perturbation theory. "The authors thank L. G. Zastavenko for a discussion." Orig. art. has: 1 figure and 36 formulas.

ASSOCIATION: Ob"yedinenny\*y institut yaderny\*kh issledovaniy  
(Joint Institute of Nuclear Research)

SUBMITTED: 21Apr64

ENCL: 00

SUB CODE: NP, GP

NR REF SOV: 003

OTHER: 002

Card 2/2

VOLKOV, M.K., Veterinarnyy vrach.

Penicillin and glucose therapy of eye diseases in animals.  
Veterinariia 30 no.4:48 Ap '53. (MLRA 6:4)

1. Sovkhoz "Pobeda", Vologodskoy oblasti, Sokol'skogo rayona.

VOLKOV, M.K.; PAVLIKOVSKI, A.; RYBARSKA, V.; SOLOV'YEV, V.G.

Exactitude attainable in calculating the properties of heavily deformed nuclei on the basis of a superfluid model. Izv. AN SSSR. Ser. fiz. 27 no.7:878-890 '63. (MIRA 16:8)

1. Laboratoriya teoreticheskoy fiziki Ob'yedinennogo instituta yadernykh issledovaniy.

(Nuclear models)



VOLKOV, M.K.; YEFIMOV, G.V.

[Analytical properties of amplitudes in the second order  
of the nonlinear field theory] Analiticheskie svoistva  
amplitud vo vtorom poriadke nelineinoi teorii polia.  
Dubna, Ob"edinennyi in-t iadernykh issl., 1964. 9 p.

1. VOLKOV, M.K.; D.V.M.
2. USSR (600)
4. Glucose
7. Penicillin and glucose therapy of eye diseases in animals, M.K. Volkov, D.V.M. Veterinariya 30 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.



1. VOLKOV, M. K.; V.D.M.
2. USSR (600)
4. Veterinary Medicine
7. Penicillin and glucose therapy of eye diseases in animals. Veterinaria  
30, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

VOLKOV, M. K.

Treatment of Eye Diseases in Animals with Penicillin Containing Glucose

SO: Veterinariya; Vol. 30; No. 4; April 1953, Unclassified.

Trans. #121 by L. Lulich  
Veterinarian, Sovkhoz "Probeda," Vologda Oblast, Sokol Rayon

VOLKOV, M.K.; VERESH, T.

Allowing for superfluid effects in  $\alpha$ -decay on the vibration levels of daughter nuclei. Dokl. AN SSSR 148 no. 4: 799-802 F '63. (MIRA 16:4)

1. Ob'yedinennyy institut yadernykh issledovaniy. Predstavleno akademikom N.N. Bogolyubovym.  
(Superfluidity) (Nuclei, Atomic) (Alpha rays—Decay)

L 17857-63

EWI(m)/BDS AFFTC/ASD

S/0048/63/027/007/0378/0390

ACCESSION NR: AP3003690

68  
55

AUTHOR: Volkov, M.K. ; Pavlikovski, A; Ry\*barska, V.; Solov'yev, V.G.

TITLE: Accuracy of superfluid model calculations of the properties of strongly deformed nuclei / Report of the Thirteenth Annual Conference ~~held~~ on Nuclear Spectroscopy held in Kiev from 25 January to 2 February 1963/

SOURCE: AN SSSR, Izv.Seriya fizicheskaya, v.27; no.7, 1963, 878-890

TOPIC TAGS: nuclear level , Bogolyubov method, superfluid nuclear model

ABSTRACT: During the past few years one of the authors (V.G.Solov'yev) alone and in collaboration with others (numerous citations) published calculations of the characteristics and behavior of levels in odd nuclei, energies of two-quasi-particle states in even-even nuclei and the influence of pairing correlations on transition probabilities in strongly deformed nuclei in the mass number regions from 152 to 188 and 225 to 225. Despite the fact that generally good agreement was obtained with experimental data, the accuracy of the calculations stands in need of checking in view of the fact that certain approximations were involved. In the present paper the authors investigate the accuracy of the mathematical method based on the Bogolyubov canonical transformation, which was used for calculating the energies

Card 1/3

L 17857-63

ACCESSION NR: AP3003890

6

of single-quasi-particle excited states of systems with an odd number of nucleons, the energies of two-quasi-particle states of systems consisting of an even number of nucleons, and the corrections connected with superfluidity of the ground and excited states to be applied to calculated transition probabilities, that are used to evaluate ft values for  $\beta$ -transition, forbiddenness factor in  $\alpha$ -decays, etc. The various approximations are discussed and some precise and approximate calculations are compared. It is concluded that the accuracy of calculations based on the superfluid nuclear model is limited mainly by inadequate knowledge of the levels in the "average" field and their fluctuation, and not by the mathematical formalism. It is estimated that the error in the calculation of the energies of two-quasi-particle levels amounts to 10-20%; the error in calculating the corrections to  $\alpha$ ,  $\beta$  and  $\gamma$  transition probabilities varies in the range from 10 to 100%. "In conclusion we express our deep gratitude to N.N.Bogolyubov, I.N.Mikhaylov and N.I.Pyatov for valuable discussions and to N.A.Buzdavina, I.N.Kukhtina and R.N.Fedorova for numerical computations." Orig.art.has: 8 formulas, 5 figures and 5 tables.

ASSOCIATION: Joint Institute for Nuclear Studies.

Card 2/3



VASIL'CHIKOV, M.V.; VOLKOV, M.M.

Hot rolling of long threads with a coarse pitch on hollow shapes.  
Kuz.-shtam. proizv. 2 no.11:7-10 H '60. (MIRA 13:10)  
(Rolling (Metalwork)) (Screw threads)

S/193/61/000/010/001/008  
AOO4/A101

AUTHOR: Volkov, M.M.

TITLE: Mill for the rolling of hobbing cutter blanks

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 10, 1961, 7-9

TEXT: The author describes a method and a mill for the transverse-helical rolling of blanks for hobbing cutters of 1 - 12 module, developed by the Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut metallurgicheskogo mashinostroyeniya (All-Union Scientific Research Institute for the Planning and Design of Metallurgical Machinery) - VNIImetmash. The mill consists of the blank unloading mechanism, roll approach and retraction device, working stand, multipurpose spindles, blank feeding mechanism, combined reducer and drive. During the setting of the mill the rolls are approached and retracted manually. The work rolls are permanently pressed against the screws by a spring, whose stress is adjusted by racks. The angular setting of the rolls is effected by four screws via spherical blocks. Axial pre-setting of the rolls is effected by the turning of two rolls with the aid of tapered sleeves on the heads of the multipurpose spindles. The work roll unit and multipurpose spindles are of two

Card 1/2

Mill for the rolling of hobbing cutter blanks

S/193/61/000/010/001/002  
A004/A101

different sizes, for blanks of hobbing cutters up to module 5 and higher modules. The work rolls are driven by two-speed motors via helical and herringbone wheels, clutch and multipurpose spindles. The unloading mechanism removes the rolled blank from the work stand and drops it into a box or a lined pit. The author gives a description of the rolling process and presents the following technical data: roll diameter - 190-300 mm; roll speed - 30 and 60 rpm; maximum angle of inclination of roll axes -  $10^{\circ}$ ; maximum metal pressure on the rolls - 40 tons; maximum torque on the roll - 500 kg/m; power of mill drive - 25/80 kw; overall dimensions of mill (length x width x height) 6.8 x 2.3 x 2.4 m; weight of mechanical mill equipment - 16.4 tons. The length of blanks being rolled amounts to 500 - 800 mm, while the rated output of the mill is 500 - 700 milling cutters (of medium module) per shift. The mill is being mounted at the "Frezer" Plant and will yield annual savings of some 100,000 rubles. There is 1 figure.

Card 2/2

VOLKOV, M.M.

Rolling mill for rolling blanks for hobbing cutters. Biul.tekh.-  
ekon.inform. no.10:7-9 '61. (MIRA 14:10)  
(Rolling mills)

VASIL'CHIKOV, M.V.; VOLKOV, M.M.; MEYLER, B.A.

Lateral-helical rolling of hobbing-cutter billets.      Stan. 1  
instr. 34 no.11:12-14 N '63.      (MIRA 16:12)

VOLKOV, M.M.

Rolling billets for hobbing cutters. Mashinostroitel' no.7:33  
Jl '63. (MIRA 16:9)

(Rolling (Metalwork))

S/182/60/CCC/011/CC2/016  
A161/A029

AUTHORS: Vasil'chikov, M.V., Volkov, M.M.

TITLE: Hot Rolling of Long Large-Lead Thread on Hollow Work

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 11, pp.7-10

TEXT: The VNIIMETMASH Institute has developed a new method and a mill for hot rolling of mine propping bolts with round thread. The rolling process is called "poperechno-vintovaya prokatka" (helical cross rolling), its essence is illustrated (Fig. 3). Up to now these bolts were cut. The new method raises the productivity by 25-30 times, eliminates metal waste into chip, and cuts the cost of a bolt from 6-7 rubles to 4-5. The first mill is working at the Toretskiy mashinostroitel'nyy zavod ugol'nogo mashinostroyeniya (Tortsev Plant of Coal Mining Machinery). The article includes the drawing of a roll (Fig. 4) and a calculation formula for the roll width. Experiments were carried out with rolling on a mandrel and without mandrel and it was stated that the mandrel had practically no effect on the deformation process in thick-wall screws due to the increas-

Card 1/4

S/182/60/000/011/002/016  
A161/A029

## Hot Rolling of Long Large-Lead Thread on Hollow Work

ing inner diameter of the blank, but when the blank wall was not thick, the mandrel was necessary. The rolling process parameters for the round thread "136 x 32" and "130 x 32" on blanks of 30Г9Л (30G9L) steel are given. The experimentally established dimensions for cast hollow blanks are: a) for "136 x 32" thread - outer diameter (D) 123 mm and inner diameter (d) 45 mm; b) for "130 x 32" thread - D = 117 mm, d = 42 mm. Blanks are heated at the Tortsy plant in a fuel oil firing furnace, the thread rolling temperature is 950 - 1,050°C. In order to facilitate the feed of the blanks into the mill the blanks are bevelled on 30 mm length with a 20° taper angle (see Fig. 4 "ix"). Hot-rolled steel blanks are used as well. In this case they are of 40X (40Kh) alloy steel with D = 90 mm and 25 mm taper ("ix") with 15°. Axial elongation of the blanks after rolling is 8-10%. The metal in the rolled thread is improved comparing to a cast structure; it becomes fibrous on the outside (Fig. 8). The rolled thread surface is smoother than a cut surface and rolled bolts are easier to retract in the mine. The rolling mill is not described. The dimensions  
Card 2/4



S/182/60/000/011/002/016  
A161/A029

Hot Rolling of Long Large-Lead Thread on Hollow Work

and elements of the profile of the rolls are given. There are 8 figures and 3 tables.

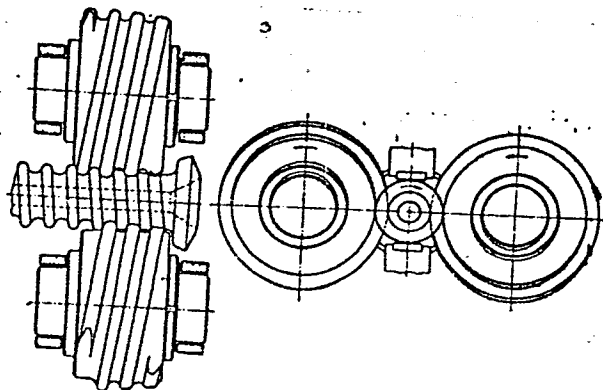


Figure 3:

Card 3/4

S/182/60/000/011/002/016  
A161/A029

Hot Rolling of Long Large-Lead Thread on Hollow Work

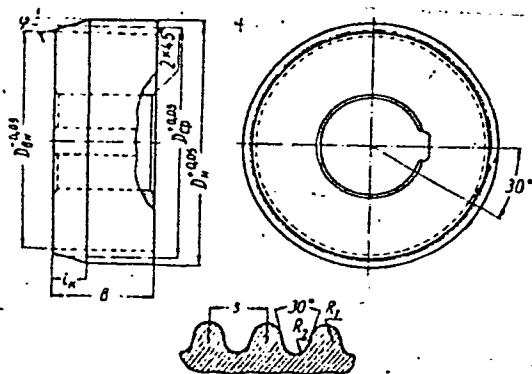


Figure 4:

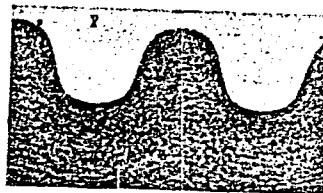


Figure 8:

Card. 4/4

VASIL'CHIKOV, M.V.; VOLKOV, M.M.; MEYLER, B.A.

New techniques for making billets for worm-gear cutters. Stan.1  
instr. 30 no.4:7-9 Ap '59. (MIRA 12:6)  
(Gear-cutting machines)

27041

S/182/61/000/004/001/007  
D038/D112

1.1300

AUTHOR: Volkov, M.M.

TITLE: Gold thread rolling on long screws

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 4, 1961, 1-5

TEXT: The article describes a new process of transverse-helical, large-pitch cold-rolling of screws for the feed mechanisms of 8-15XПТР(8-15KhPTR) and 15-30XПТР (15-30KhPTR) mills. This process was developed by the VNIIMETMASH, and the screws were manufactured by the Perovskiy mashinostroitel'nyy zavod (Perovo Machine Building Plant). In this process the length of the rolled thread is practically unlimited and the center-to-center distance between the rolls remains constant. It is stated to be a progressive method of working metals by pressure and is extensively used in machine building plants. The following very hard and high-wearing steels are used: X12 M (Kh12M), and X 6 Bφ (Kh6VF). The rolls used in the tests were made from X12φ1 (Kh12F1). Prior to final heating, the rolls were packed in charcoal in metal boxes which were coated with clay, heated for 2 hrs. in chamber furnaces at 990-1040°C, cooled for 1 hr in an oil bath at 160-200°C and finally cooled in air. It is stated that the precision of the rolled thread depends on the following: (1) correct calculation and precise manufacture of rolls; (2) correct angular and

Card 1/2

X

27041

S/182/61/000/004/001/007

D038/D112

Cold thread rolling .....

axial setting of the rolls; (3) rigidity of the mill; (4) correct definition of the blank diameter and the permissible deviation; (5) correct rolling conditions. The dimensions of the rolled thread profile proved to be very stable; the variation in the outer diameter of the rolled thread did not exceed 0.1 mm, and in the inner diameter 0.6 mm, according to the ~~OCT BK 714~~ (OST VKS 7714) standard, the accumulated error in the thread pitch did not exceed 50 microns, and the angle of thread of the rolled thread was within the range of  $28^{\circ}38'$  -  $30^{\circ}42'$ . Deviations in the dimensions of the rolled thread were caused by insufficient precision in the roll manufacture. The author concludes that the introduction of the method resulted in a saving of metal, cheaper tools, higher precision and better surface finish of thread, and a higher fatigue strength in the screws. The tests were carried out at the laboratoriya prochnosti TsNIITMASHa (TsNIITMASH Laboratory for Strength Testing). There are 5 figures and 1 table.

Card 2/2

VOLKOV, M.M., inzh.

Investigating the quality and precision of screws with rolled  
threads. Vest.mashinostr. 42 no.6:57-60 Je '62. (MIRA 15:6)  
(Screws--Testing)

SOV/122-58-6-16/37

AUTHOR: Vasil'chikov, M.V., Candidate of Technical Sciences,  
Volkov, M.M. and Barbarich, M.V., Engineers

TITLE: The Rolling-on of Teeth in the Fluted Pins of Cotton  
-spinning Machines (Nakatka zub'yev riflennykh tsilindrov  
khlopkopryadil'nykh mashin)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 6, pp 45-46 (USSR)

ABSTRACT: A process for cold-rolling the teeth in fluted pins for  
cotton-spinning machines developed by the TsNIITMASH  
Institute is described. In these components, the flutes  
have a varying pitch. The rolling roller, of a diameter  
which is a multiple of the component diameter, must have  
teeth repeating several times the cycle of pitch  
variation in the component. To avoid the need for a  
precise relation between several rollers, only one roller  
rolls the teeth. The other two in a three-roller unit  
clear the teeth and simultaneously surface-roll the neck  
sections between the fluted lengths of the pin. The  
correct choice of the diameter of the fluted sections  
before rolling proved to be the main factor in achieving  
good accuracy. Tests carried out at different surface  
speeds have shown the best speed to be about 9 m/min. The  
flute rolling roller was itself produced by a rolling

Card 1/2

SOV/122-58-6-16/37

The Rolling-on of Teeth in the Fluted Pins of Cotton-spinning  
Machines

process from a master component. The latter was made of  
- ShKh15 steel, hardened to 50-55 Rockwell C. The master  
was compressed between 3 blanks of rolling rollers. The  
master has a tapered entry section and is drawn through  
between the roller blanks. These blanks were made of  
0.45% carbon steel or of low-alloy medium carbon steel.  
After the rolling operation, they were heat-treated and  
polished. The height of the teeth in the master and the  
rolling roller exceeded that of the component by 0.2 mm.  
The resultant pressure during the component rolling  
operation was measured. When rolling flutes of 35 mm  
length together with 2 plain neck sections of 35 mm lengths  
each, the total pressure amounted to 6 tons. Without the  
surface rolling of the necks the pressure amounted to  
4.8 tons. There are 3 figures.

Card 2/2 1. Rolling mills--Applications



VOLKOV, M.M., kand.tekhn.nauk

Stress on rolls and power consumption in transverse-spiral rolling  
of coarse screw threads. Vest.mashinostr. 44 no.12:52-57 D '64.  
(MIRA 18:2)

VASIL' CHIKOV, M.V., kand. tekhn. nauk; VOLKOV, M.M., inzh.; BARBARICH,  
M.B., inzh.

Rolling teeth on fluted cylinders used in cotton spinning machines.  
Vest. mash. 38 no. 6:45-46 Je '58. (MIRA 11:?)  
(Rolling(Metalwork))

ZELENTSOV, V.V.; KALINNIKOV, V.T.; VOLKOV, M.N.

Magnetochemistry of vanadyl salts with dicarboxylic acids.  
Zhur. neorg. khim. 10 no.6:1506-1507 Je '65.

(MIRA 18:6)

VOLKOV, M.N.

Osteochondropathy of the caput femoris in children. Zdravookh-  
ranenie 2 no.6:21-25 N-D '59. (MIRA 13:6)

1. Iz kafedry khirurgii i ortopedii detskogo vozrasta (zav. -  
chlen-korrespondent AMN SSSR S.D. Ternovskiy) 2-go Moskovskogo  
meditsinskogo instituta.

(OSTEOCHONDROSIS)

ZHUKOV-VEREZHNIKOV, N.N.; VOLKOV, M.N.; RYBAKOV, N.I.; SAKSONOV, P.P.;  
KOZLOV, V.A.; KONSTANTINOV, P.A.; ANTIPOV, V.V.; LOEROV, N.N.;  
ANISKIN, Ye.D.

New ways of studying chemical protection against genetic changes.  
Probl. kosm. biol. 4:445-450 '65. (MIRA 18:9)

L 14295-66 EWT(m)/EPF(n)-2 GG/RD

ACC NR: AT6003878

SOURCE CODE: UR/2865/65/004/000/0445/0450

AUTHOR: Zhukov-Verezhnikov, N. N.; Volkov, M. N.; Rybakov, N. I.; Saksonov, P. P.;  
Kozlov, V. A.; Konstantinov, P. A.; Antipov, V. V.; Dobrov, N. N.; Aniskin, Ye. D.

ORG: none

TITLE: New ways of studying chemical protection against genetic changes

19,44,55

32  
B+1

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 445-450

TOPIC TAGS: bacteria, x ray irradiation, bacterial genetics, chemical agent

ABSTRACT: Aminothiols and some pyrimidine analogs were tested for their ability to block development of infectious phage from prophage after induction of E. coli K-12 ( $\lambda$ ) with x-rays. Doses with a previously established non-toxic effect (0.05% concentration) were used. The desired chemical preparation was added to a bacterial culture diluted in a physiological medium. Experimental and control samples were subjected to x-ray irradiation (dose, 15,000 r) and then cultured on agar. The number of induced phage particles in irradiated samples with and without each preparation was then compared. 2-Mercaptopropylamine hydrochloride was

Card 1/2

2

L 14295-66

ACC NR: AT6003878

most effective; cultures treated with it produced 119 times fewer phage particles than control samples. Other good inhibitors of induced phage formation were 2-(gamma-aminopropyl) disulfide dihydrobromide, sodium diethyldithiocarbamate and ammonium dithiocarbamate, which reduced phage production 76.3-70.1 times. Less effective were the salts of  $\beta$ -mercaptoethylamine tested: 2-mercaptoethylamine hydrobromide, 2-mercaptoethylamine disulfide hydrochloride, 2-mercaptoethylamine hydroiodide, and 2-mercaptoethylamine hydrochloride.

The experimental data show the essential connection between the chemical structure of the tested preparations and their ability to block the development of infectious phage. The antigenetic effect of  $\beta$ -mercaptoethylamine preparations is determined by their acid radicals as well as by their base. It may be possible to obtain even more effective preparations of this compound by forming salts with other acids. The failure of 3- $\beta$ -aminoethylisothiuronium hydrobromide to produce an antigenetic effect is especially interesting because in previous experiments this compound decreased the death rate of animals subjected to a lethal radiation

dose by 70-100%. Orig. art. has: 1 table. [ATD PRESS: 4091-F]  
 SUB CODE: 06 / SUBM DATE: none / ORIG REF: 013 / OTH REF: 003  
 Card 2/2

L 14294-66

ACC NR: AT6003881

tained in the second generation. However, preparation P-46 completely removed the injurious radiation effect in that generation. Experimental data indicate the possibility of partially or completely removing the depressing effect of  $\beta$ -radiation on plants with the help of physiologically active compounds. Orig. art. has: 4 tables. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 005

CC  
Card 3/3



VOLKOV, M.N., Cand Agr Sci -- (diss) "Fattening  
and slaughtering qualities of <sup>hybrids</sup> ~~pure~~ of various  
breeds, breed groups, and their ~~cross-breeds~~  
~~exhibitors~~ represented at the All-Union Agri-  
cultural Exhibit." Novocherkassk, 1958, 21 pp  
(Min of Agr. Novocherkassk, ~~1958~~ ~~XXXXXXXXXXXX~~  
Zoological Vet Inst in First Cavalry Army) 150  
copies (KL, 29-58, 134)

- VOLKOV, Mikhail Nikolayevich; ASTAKHOV, S.A., red.; YERSHOVA, T.S.,  
tekh. red.

[Fattening characteristics in swine of various breeds] Ot-  
kormochnye kachestva svinei raznykh porod. Moskva, Izd-vo  
M-va sel'.khoz. RSFSR, 1959. 33 p. (MIRA 14:12)  
(Swine)

AUTHOR: Volkov, M.N., Doctor of Chemical Sciences 3-58-5-26/35

TITLE: Intervuz: Conferences on Science and Methods ,Mezhvuzovskiy  
nauchnyye i metodicheskiye konferentsii) Electronic Accelerators (elektronnyye uskoriteli)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 5, page 60 (USSR)

ABSTRACT: The Nauchno-tekhnicheskiy sovet Ministerstva vysshego obrazovaniya SSSR (Scientific-Technical Council of the USSR Ministry of Higher Education) decided to convene in February 1958 in Tomsk an Intervuz Conference on Electronic Accelerators. Among the delegates were workers of important scientific institutions - the Mezhdunarodnyy ob'yedinennyy institut yadernykh issledovaniy (International Institute of Joint Nuclear Research), Fizicheskiy institut AN SSSR (Physics Institute of the USSR Academy of Sciences), Institut metallurgii AN SSSR (Institute of Metallurgy of the AS USSR Academy of Sciences), Institut biologicheskoy fiziki AN SSSR (Institute of Biological Physics of the AS USSR), Institut eksperimental'noy patologii i terapii raka AMN SSSR (Institute of Experimental Pathology and Therapy of Cancer, USSR Academy of Medical Sciences), Leningradskiy fiziko-tekhnicheskiy in-

Card 1/2

Intervuz Conferences on Science and Methods.

3-58-5-26/55

Electronic Accelerators

stitut AN SSSR (Leningrad Physico-Technical Institute of the AS USSR), and others. In the Section for Using Electronic Accelerators in Industry, Physics, Medicine and Biology, and in the Theoretical Section, the betatrons issued by the Tomskiy politekhnicheskiy institut (Tomsk Polytechnical Institute) were mentioned as being widely used in detecting of defects in metals, studying the reaction of charged particles on substance, and in medical treatment. The reports of workers of the Tomskiy meditsinskiy institut (Tomsk Medical Institute) Professor I.V. Toroptsev, Dotsent N.V. Sokolova and others on the diseases of animals caused by the radiation of betatrons of 10 and 15 Mev were heard with great interest. In the Theoretical Section, Professor A.A. Vorob'yev delivered a report on a new method of accelerating electrons to very high energies. This method is based on using running waves in closed wave guides. In conclusion the conference indicated ways for a wider use of betatrons in different branches of science and technique and for an improvement in their structure. Library of Congress

AVAILABLE:  
Card 2/2

ZELENTSOV, V.V.; VOLKOV, M.N.; ALLENOV, V.M.; AMINOV, T.G.

Magnetic susceptibility of copper benzoate. Zhur. neorg. khim.  
10 no.2:564-565 F '65. (MIRA 18:11)

1. Moskovskiy fiziko-tekhnicheskiy institut. Submitted June  
30, 1964.

ZHUKOV-VERZHNIKOV, N. N.; VOLKOV, M. N.; MAYSKIY, I. N.; TRIBULEV, G. P.; RYBAKOV, N. I.;  
SAKSONOV, P. P.; ANTIPOV, V. V.; KOZLOV, V. A.; PODOPLELOV, I. I.

"Results of microbiological and cytological investigation on Vostok type space-  
craft."

paper presented at the 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

ZELENTSOV, V.V.; KALINNIKOV, V.T.; VOLENOV, M.N.

Vanadyl alkanoates having anomalous magnetic properties. Zhur.  
struk. khim. 6 no. 4:647-649 J1-Ag '65 (MIRA 19:1)

1. Moskovskiy fiziko-tekhnicheskii institut. Submitted October 7,  
1964.

69852  
SOV/35-59-9-6947

3.1420  
Translation from: Referativnyy zhurnal, *Astronomiya i Geodeziya*, 1959, Nr 9, p 11 (USSR)

AUTHORS: Chebotarev, G.A., Volkov, M.S.

TITLE: The Motion of Patroclus in the Gravitation Field of the Sun and Proto-Jupiter

PERIODICAL: Byul. In-ta teor. astron. AS USSR, 1959, Vol 7, Nr 3, pp 202 - 207  
(Engl. résumé)

ABSTRACT: The motion of a small planet of the Trojan group, Patroclus, was examined in the gravitation field of the Sun and proto-Jupiter in order to clear up the question on the stability of the motion of Patroclus. It was assumed that the motion of Patroclus took place in the plane of Jupiter, that the motion of Jupiter was un-perturbed and its mass was 20 times greater than the present one; for the daily motion the present value was preserved. The numerical integration was carried out during 33 revolutions of Jupiter. During this period the radius-vector of Patroclus changes from 3.7 to 7.8 A.U. and the distance from Jupiter, from 1.9 to 11.9 A.U. After 27 revolutions its stability of motion is disturbed and it departs from the point of libration. Bibl. 9 titles.

N.S. Yakhontova

✓

Card 1/1



VOLKOV, M.S.

S/511/61/008/002/002/004  
B163/B186AUTHORS: Chebotarev, G. A., and Volkov, M. S.

TITLE: The stability of circular orbits with retrograde motion in the sphere of action of Jupiter

SOURCE: Akademiya nauk SSSR. Institut teoreticheskoy astronomii. Byulleten'. v. 8, no. 2(95), 1961, 99 - 102

TEXT: Five initially circular satellite orbits were computed numerically with the following initial conditions: in the initial moment, the sun, Jupiter and the satellite are arranged along the x axis, and Jupiter is in perihelion position. The initial major axis of the satellite orbit is  $a_0 = 0.2, 0.25, 0.3, 0.35, \text{ and } 0.4$  astronomical units, respectively. Since the sphere of action of Jupiter under these conditions is  $R = 0.2790$ , satellites I and II are within the sphere of action, while III, IV, and V are outside. The numerical computation is carried out with an accuracy of six decimal places, and the method is the same as in earlier paper by G. A. Chebotarev and A. I. Boshkova. The integration is performed for a time interval of 11.86 years equal to one sidereal revolution of Jupiter around the sun. The variations of the major axis and the eccentricity with

Card 1/2

S/511/61/008/002/002/004  
B163/B186

The stability of circular ...

time are given in tables and curves. Satellites I, II, and III have stable orbits. The orbit of satellite IV is unstable, but in the considered time interval of 11.86 years it has not yet left the Jupiter system. The orbit of satellite V rapidly changes over into a hyperbolic orbit with respect to Jupiter, whose orbit elements are given. While it was found in the earlier paper mentioned above that satellites with forward motion leave the sphere of action of Jupiter for ever, if their initial major axis  $a_0$  is 0.2 astronomical units the instability of retrograde orbits begins with an axis no less than  $a_0 = 0.35$ , i.e. beyond the limits of the sphere of action of Jupiter. There are 5 figures and 5 tables.

Card 2/2

VOLKOV, M.S.

Rotational motion of artificial satellites on an elliptic orbit.  
Biul.Inst.teor.astron. 9 no.4:274-282 '63.

Periodic solution of the second kind representing rotational motion of a satellite on a circular orbit. Ibid.:283-291 '63.  
(MIRA 17:3)

ACCESSION NR: AT4001204

S/2511/62/008/005/0343/0358

AUTHOR: Volkov, M. S.

TITLE: Periodical translational-rotational motion of a satellite in the gravitational field of a sphere

SOURCE: AN SSSR. Inst. teor. astron. Byulleten', v. 8, no. 5, 1962, 343-358

TOPIC TAGS: satellite translational rotational motion, periodic motion, spherical gravitational field, periodic solution, Poincare method, approximate solution, Euler case, Hamilton Jacobi equation, parameter variation method, force function expansion, circular satellite orbit, circular orbit

ABSTRACT: In view of the fact that earlier solutions of the problem of one finite body simultaneously spinning about its axis and rotating about another finite body (G. N. Duboshin, Astron. Zh. v. 36, 1--2; V. T. Kondurar', Tr. GAISH v. 21) pertain to the case where the precessional velocity of the satellite rotation coincides with its orbital velocity of motion, whereas in the case of artificial

Card 1/8

ACCESSION NR: AT4001204

earth satellites the ratio of the orbital velocity of motion to the precessional velocity is a small quantity, the author obtains for this problem a periodic solution similar to the periodic solution of the first kind in the limited three-body problem. The satellite orbit is assumed circular. The existence of periodic solutions is proved by the Poincare method and the solutions themselves obtained in the form of a series expansion of the ratio of the orbital velocity to the precessional velocity. This periodic solution depends on four arbitrary constants and can be used as an intermediate rigorous solution for the construction of a general approximate solution. An approximate solution of the system of differential equations describing the rotation of the satellite is obtained as part of the derivation. The only limitation imposed on the shape of the satellite is that it have dynamic symmetry. Orig. art. has: 73 formulas.

ASSOCIATION: Inst. Teor. Astron. AN SSSR (Institute of Theoretical Astronomy AN SSSR)

Card 2/3a

3.7200

249100

S/044/62/000/012/033/049

A060/A000

AUTHOR: Volkov, M. S.

TITLE: Periodic alternating motion of a satellite in the gravity field of a sphere

PERIODICAL: Referativnyy zhurnal, Matematika, no. 12, 1962, 32, abstract 12V165 (Byul. In-ta teor. astron. AN SSSR", 1962, v. 8, no. 5, 343 - 358, summary in English)

TEXT: A general approximate solution is obtained for a system of differential equations describing the orbit of a satellite.

[Abstracter's note: Complete translation]

10

Card 1/1

S/511/61/008/003/003/004  
A001/A101

24.4100

AUTHOR: Volkov, M.S.

TITLE: Periodical motions of a particle in the gravitational field of an oblate planet and its satellite

SOURCE: Akademiya nauk SSSR. Institut teoreticheskoy astronomii. Byulleten'. v. 8; no. 3 (96), 1961, 215 - 224

TEXT: The problem is formulated as follows: The central massive body has the shape of a levelled ellipsoid of revolution differing only slightly from a sphere; a satellite of small but non-zero mass moves in the equatorial plane of the ellipsoid in a circular orbit; in their common gravitational field moves a zero-mass particle. It is requested to find the conditions of existence for periodic orbits of this particle. In solving the problem, the author makes use of Poincaré's small-parameter method and derives first equations for the motion of the satellite in the gravitational field of the central ellipsoid. Then he proceeds to formulating equations for the motion of a test particle in their summary gravitational field in a circular orbit. Introducing Delaunay's canonical varia-

13

Card 1/2

Periodical motions of a particle in the ....

S/511/61/008/003/003/004  
A001/A101

bles, conditions of existence of periodic solutions are investigated and found to exist in three types. The first-type periodic solutions, exist under conditions pointed out by Zeipel. The second-type periodic solutions exist for cases when the solution period differs from the period of the generating solution (Schwarzschild solution) and for cases when the periods of solution and generating solution coincide (Poincaré's solutions). The author proves also the existence of Schwarzschild's third-type periodic solutions. The considerations are illustrated by the analysis of a particular case of Saturn as a central body and its satellite Mimas. There are 2 tables.

VB

SUBMITTED: July 11, 1960

Card 2/2



CHEBOTAREV, G.A.; VOLKOV, M.S.

Stability of circular satellite orbits with a backward movement in  
the sphere of action of Jupiter. Biul.Inst.teor.astron. 8 no.2:99-  
102 '61. (MIRA 14:4)

(Satellites--Jupiter)

GENKIN, A.M.; VOLKOV, M.S.

Inhibition of methemoglobin synthesis by glutamic acid. Biul.  
eksp. biol. i med. 49 no. 5:72-74 My '60. (MIRA 13:12)

1. Iz kafedry biokhimii (zav. - prof. S.A. Brylovskiy) Sverdlovskogo  
meditsinskogo instituta (dir. - prof. A.F. Zverev). Predstavlena  
deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.  
(HEMOGLOBIN) (GLUTAMIC ACID)

3.1420

69852  
SOV/35-59-9-6947

Translation from: Referativnyy zhurnal, *Astronomiya i Geodeziya*, 1959, Nr 9, p 11 (USSR)

AUTHORS: Chebotarev, G.A., Volkov, M.S.

TITLE: The Motion of Patroclus in the Gravitation Field of the Sun and Proto-Jupiter

PERIODICAL: Byul. In-ta teor. astron. AS USSR, 1959, Vol 7, Nr 3, pp 202 - 207  
(Engl. résumé)

ABSTRACT: The motion of a small planet of the Trojan group, Patroclus, was examined in the gravitation field of the Sun and proto-Jupiter in order to clear up the question on the stability of the motion of Patroclus. It was assumed that the motion of Patroclus took place in the plane of Jupiter, that the motion of Jupiter was un-perturbed and its mass was 20 times greater than the present one; for the daily motion the present value was preserved. The numerical integration was carried out during 33 revolutions of Jupiter. During this period the radius-vector of Patroclus changes from 3.7 to 7.8 A.U. and the distance from Jupiter, from 1.9 to 11.9 A.U. After 27 revolutions its stability of motion is disturbed and it departs from the point of libration. Bibl. 9 titles.

Card 1/1

N.S. Yakhontova

GENKIN, A.M.; VOLKOV, M.S.

Reduction of methemoglobin by glutamic acid. *Biul. eksp. biol. i med.*  
47 no.3:50-52 Mr '59. (MIRA 12:7)

1. Iz kafedry biokhimii (zav. - prof. S.A. Braylovskiy) Sverdlovskogo  
meditsinskogo instituta (dir. - prof. A.F. Zverev). Predstavlena deyst-  
vitel'nym chlenom AMN SSSR V. N. Chernigovskim.

(METHEMOGLOBINEMIA, exper.

eff. of glutamic acid (Rus))

(GLUTAMATES, eff.

on exper. methemoglobinemia (Rus))

VOLKOV, M.S.

Periodic motions of a particle in the gravitational field of an  
oblate planet and its satellite. Biul.Inst.teor.astron. 8  
no.3:215-224 '61. (MIRA 14:11)  
(Mechanics, Celestial)

VOLKOV, M.S.

Rotational motion of a satellite in the vicinity of the orbital  
plane. Biul. Inst. teor. astron. 9 no.2:144-153 '63. (MIRA 16:9)  
(Problem of two bodies) (Artificial satellites)

VOLKOV, M.S.

Series representing translational-rotational motion of a satellite  
in the gravitational field of a sphere. Biul.Inst.teor.astron. 9  
no.2:120-143 '63. (MIRA 16:9)  
(Problem of two bodies) (Artificial satellites)

VOLKOV, M.S.

Plane periodical motions in the problem of two finite bodies having  
a symmetry plane. *Biul.Inst.teor.astron.* 8 no.4:299-316 '62. (MIRA 16:6)

(Problem of two bodies)



VOLKOV, M. V.

MAKSIMOV, F.K.; KOSTROMIN, Ye.P.; VOLKOV, M.V.; KRYUKOV, A.M.; SHABANOV, T.D.

Preparation of concrete mix in a mixing and crushing machine. Rats.  
1 izobr.predl. v stroi. no. 75:3-4 '53. (MLRA 7:7)  
(Concrete)

VOLKOV, M.V., inzh.

Interesting method of track repair after heaving. Put' i put.  
khoz. no.12:5-6 D '59. (MIRA 13:4)

1. Nachal'nik distantsii g, Murmansk.  
(Railroads--Track)

VOLKOV, M.V.; DVORKIN, A.M.

Prevention and control of agricultural accidents is the chief task  
of surgeons employed in the agricultural industry. Khirurgiia 38  
no.10:3-6 0 '62. (MIRA 15:12)

1. Tsentral'nyy instituta travmatologii i ortopedii, Moskva.  
(AGRICULTURE--ACCIDENTS)

VOLKOV, M. V.

ADRENAL GLANDS - TUMORS

Adrenocortical tumors in children. *Pediatria* no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

**VOLKOV, M.V.**

Amputation stumps of extremities in children according to data obtained  
by roentgenological examinations. Vest.rent.i rad. no.5:61-68 S-0 '53.  
(MLRA 7:1)

1. Iz kafedry khirurgii detskogo vozrasta (zavednyushchiy - professor  
S.D.Ternovskiy).

(Amputation stump)

VOLKOV, M.V., kandidat meditsinskikh nauk

Application of subperiosteal method of reamputation in children.  
Khirurgiiia no.4:33-37 Ap '54. (MLRA 7:6)

1. Iz kafedry khirurgii detskogo vozrasta (zav. prof. S.D.Ter-  
novskiy) II Moskovskogo meditsinskogo instituta imeni I.V.Stalina  
na base detskoy bol'nitsy imeni N.F.Filatova (glavnyy vrach M.N.  
Kalugina)

(AMPUTATION,

\*subperiosteal reamputation in child.)

VOLKOV, Mstislav Vasil'yevich

[Amputation of the extremities in children] Amputatsii konechno-  
stei u detei. M, Medgiz, 1955 162 p. (MLRA 8:11)  
(AMPUTATIONS OF ARM) (AMPUTATIONS OF LEG)

V-A KOV, AF

TERNOVSKIY, S.D., professor; VOLKOV, M.V., kandidat meditsinskikh nauk

Conservative principle in the treatment of severe injuries of the  
extremities and in amputation in children. Ortop.travm.protez.,  
Moskva no.1:43-48 Ja-F '55. (MLRA 8:10)

1. Iz kafedry detskoy khirurgii (zav.-prof. S.D. Ternovskiy) 2-go  
Moskovskogo meditsinskogo instituta im. I.V.Stalina.

(AMPUTATION, in various diseases,  
extremities inj. in child, conservative principles)

(EXTREMITIES, wounds and injuries,  
surg. in child, conservative principles in non-radi-  
cal surg. & amputation)

(WOUNDS AND INJURIES,  
extremities, surg. in child, conservative principle  
in non-radical surg., & amputation)



VOLKOV, M.Y.

VOLKOV, M.V., kandidat meditsinskikh nauk

Conical formations with age on amputation stumps with extremities  
in children and their prevention. Ortop.travm. i protez. no.2:  
32-37 Mr-Ap '55. (MLRA 8:10)

1. Iz kafedry khirurgii i ortopedii detskogo vozrasta (zav.  
prof. S.D.Ternovskiy) 2-go Moskovskogo meditsinskogo instituta  
im. I.V.Stalina.

(AMPUTATION STUMP

extremities, conical form. in growing child. prev.)  
(GROWTH, in infant and child  
causing conical form. on amputation stumps of  
extremities, prev.)

VOLKOV, M.V., kandidat meditsinskikh nauk

Fibrous dysplasia of bones in children. Ortop., travm. i protez. 17  
no.4:9-13 J1-Ag '56. (MLRA 9:12)

1. Iz kafedry khirurgii detskogo vozrasta (zav. - prof. S.D.Ternovskiy)  
2-go Moskovskogo meditsinskogo instituta im. I.V.Stalina na baze  
detskoy bol'nitsy im N.P.Filatova (glavnyy vrach M.N.Kalugina)  
OSTEITIS FIBROSA, in inf. and child)

VOLKOV, M. V. kand. med. nauk

Clinical aspects and treatment of arthrogryposis in children. Khirurgiia  
32 no.10:31-36 0 '56 (MIRA 12:7)

1. Iz kafedry khirurgii i ortopedii detskogo vozrasta (zav.- prof. S. D. Ternovskiy) II Moskovskogo meditsinskogo instituta imeni I. V. Stalina i detskoy ortopedo-nevrologicheskoy polikliniki (zav. A. V. Uvarova) pri bolnitse imeni N. F. Filatova.

(JOINTS, dis.

arthrogryposis multiplex, ther.)

VOLKOV, M.V.

ZVYAGINSEV, A.Ye.; VOLKOV, M.V.; DOLETSKIY, S.Ya.

Sergei Dmitrievich Ternovskii. Ortop., travm. i protez. 18 no.1:  
78-79 Ja-P '57. (MIRA 10:6)  
(TERNOVSKII, SERGEI DMITRIEVICH, 1896- )

*Volkov M.V.*

VOLKOV, M.V., dotsent; GENERALOV, A.I.

Embryonic umbilical hernia. *Pediatrics* no.11:68-73 H '57. (MIPA 11:2)

1. Iz kafedry khirurgii detskogo vozrasta (zav. - chlen-korrespondent AMN SSSR prof. S.D.Ternovskiy) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova na baze Detskoy bol'nitsy imeni N.F.Filatova (glavnyy vrach M.N.Kalugina)

(HERNIA)

(UMBILICUS--ABNORMITIES AND DEFORMITIES)

POLTEVA, Yu.K.; VOLKOV, M.V. (Moskva)

Trip to France; notes of delegates to the Second International  
Congress of Physicians. Vop.okh.mat. 1 det. 3 no.1:88-90 Ja-F '58.  
(CANNES--PUBLIC HEALTH--CONGRESSES) (MIRA 11:2)

VOLKOV, M.V.; PLTEVA, Yu.K.

Second International Congress of Physicians on the Effect of Living  
and Working Conditions on Health. Vop.pit. 17 no.2:92-95 Mr-Ap '58.  
(PUBLIC HEALTH--CONGRESSES) (MIRA 11:4)

VOLKOV, M.V., dots.

Clinical picture and diagnosis of osteogenic sarcoma in children.  
Ortop.travn. i protez. 19 no.3:23-28 My-Je '58 (MIRA 11:7)  
(SARCOMA, OSTEOGENIC, in inf. & child  
diag. & clin. manifest. (Rus))



USSR / Human and Animal Morphology, Normal and Patho- 3-6  
logic -- The Skeleton

Abs Jour: Ref Zhur-Biol., No 13, 1958, 59930

Author : Volkov, M. V.

Inst : Not given

Title : Fibrous Dysplasia of the Bones in Children

Orig Pub: Ortopediya, travmatol. i protezir, 1956, No 4, 9-13

Abstract: Three out of six children with fibrous dysplasia (FD) had endocrine disturbances. FD is an independent, congenital, slowly developing, systemic, disease, associated with disturbed embryogenesis of the bony tissue and based on a dysplastic process. When FD occurs in the proximal sections of the tubular or flat bones, there are usually soli-

Card 1/2

41

USSR / Human and Animal Morphology, Normal and Patho- S-6  
logic -- The Skeleton

Abs Jour: Ref Zhur-Biol., No 13, 1958, 59930

tary or numerous cystoid foci on one side, made up of almost undifferentiated osteogenic tissue and sometimes containing pieces of cartilage. Roentgenological examination showed a thinning of the bony tissue; a strip of sclerosis was found between the osteogenic tissue and the healthy bone, and the cortical layer had become thinner. --  
I. B. Barabash

Card 2/2

TERNOVSKIY, S.D., prof.; VOLKOV, M.V., dotsent

Surgical therapy of osteoblastoclastoma in children. Ortop.travm. i protez. 20 no.6:22-27 Je '59. (MIRA 13:3)

1. Ia kafedry detskoy khirurgii i ortopedii (zaveduyushchiy - prof. S.D. Ternovskiy) 2-go Moskovskogo meditsinskogo instituta im. N.I. Pirogova. 2. Chlen-korrespondent AMN SSSR (for Ternovskiy). (GIANT CELL TUMORS, in inf. & child, surg. (Rus))

VOLKOV, M.V., dotsent; BRZHEZOVSKIY, M.M.

Neoplasms in childhood. *Pediatrics* 37 no.11:46-50 N '59.

(MIRA 13:3)

1. Iz kafedry detskoy khirurgii (zaveduyushchiy chlen-korrespondent AMN SSSR zasluzhennyy deyatel' nauki RSFSR prof. S.D. Ternovskiy) II Moskovskogo meditsinskogo instituta N.I. Pirogova na baze detskoy bol'nitsy imeni N.F. Filatova (glavnyy vrach M.N. Kalugina).  
(NEOPLASMS in inf. & child.)

TERNOVSKIY, S.D., prof.; VOLKOV, M.V., dotsent

Reply to V.N. Shtern and N.L. Kadyshes' letter. Ortop., travm.i  
protez. 20 no.12r67 D '59. (MIRA 13:5)  
(BONES--TUMORS) (SHTERN, V.N.) (KADYSHES', N.L.)

VOLKOV, M. V., (Docent), and TERNOVSKIY, S. D., (Prof.) -- Moscow

"Principles Underlying Treatment of Bone Tumors in  
Children."

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

VOLKOV, M.V., dotsent (Moskva, V-49, ul.Dimitrova, d.40, kv.27)

Chondroblastoma of the bone. Vest. rent. i rad. 35 no. 2:8-12 Mr-  
Ap '60. (MIRA 14:2)

1. Iz kafedry detskoy khirurgii (zav. -- chlen-korrespondent AMN  
SSSR zasluzhemnyy deyatel' nauki RSFSR prof. S.D. Ternovskiy)  
II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova na  
baze Detskoy bol'nitsy imeni N.F. Filatova.  
(BONES--TUMORS)

VOLKOV, M.V.

Osteoid-osteoma in children and its surgical treatment. Vop.  
onk. 6 no. 10:31-39 0 '60. (MIRA 14:1)  
(BONES--TUMORS)



VOLKOV, M.V., dotsent

Some problems in the diagnosis and surgical treatment of primary  
tumors of the skeleton in children. Khirurgiia 36 no.8:96-103  
Ag '60. (MIRA 13:11)

1. Iz kafedry detskoy khirurgii (zav. - chlen-korrespondent  
AMN SSSR prof. S.L. Ternovskiy) II Moskovskogo gosudarstvennogo  
meditsinskogo instituta imeni N.I. Pirogova.  
(BONES--TUMORS)

VOLKOV, M. V., Doc Med Sci -- "Primary tumors and dysplasia of bones in childhood. (Diagnosis and surgical treatment)." Mos, 1961. (Acad Med Sci USSR) (KL, 8-61, 257)

- 408 -

VOLKOV, M.V.; SEMENOV, B.N.

Diagnosis of bone xanthomatosis in children. Vop. okh. mat. i  
det. 6 no.5:86-88 My '61. (MIRA 14:10)

1. Iz kafedry detskoy khirurgii (zaveduyushchiy - chlen-korrespondent  
AMN SSSR prof. S.D.Ternovskiy [deceased] II Moskovskogo meditsinskogo  
instituta imeni N.I.Pirogova i detskoy bol'nitsy imeni N.F.Filatova  
(glavnyy vrach L.A.Vorokhobov).  
(LIPIDOSIS)

VOLKOV, Mstislav Vasil'yevich; SAVEL'YEVA, L.A. , red.; PETROVA,  
N.K., tekhn. red.

[Primary tumors of the bone in children; their diagnosis and  
surgical treatment] Pervichnye opukholi kostei u detei; raspozna-  
vanie i khirurgicheskoe lechenie. Moskva, Medgiz, 1962. 264 p.  
(MIRA 15:6)

(BONES—TUMORS)