

VOLKOV, S.D.

Boundary value problem in the elasticity theory of polycrystals.  
Fiz.met.i metalloved. 13 no.1:10-17 Ja '62. (MIRA 15:3)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.  
(Metal crystals) (Deformations (Mechanics))

VOLKOV, S.D., kand.fiziko-matematicheskikh nauk

Theory of fatigue strength. Rasch.na prochn. no.7:50-63 '61.  
(MIRA 14:11)

(Strength of materials)

30370

S/572/61/000/007/001/006  
D221/D302

10.7400

AUTHOR: Volkov, S.D., Candidate of Physico Mathematical Sciences

TITLE: On the theory of fatigue strength

SOURCE: Raschety na prochnost' ; teoreticheskiye i eksperimental'nyye  
issledovaniya prochnosti mashinostroitel'nykh konstruktsiy.  
Sbornik statey. no. 7, 1961, 50 - 63TEXT: The boundary surfaces of macroscopic destruction in three di-  
mensions ( $\sigma_1$ ,  $\sigma_2$ , and  $\sigma_3$ ) in the case of cyclic load are considered. The  
quasi-isotropic medium is designated as "normal", if the stress components  
and the elastic components of II type of deformations in any section of the  
macro-elementary volume are distributed according to normal law. The mean  
resistance to destruction due to singularly applied load is a linear

$$\bar{S}_p = \bar{S}_p^0 - Q (\tau_2 - \tau_T) , \quad (1)$$

Card 1/4

30370

S/572/61/000/007/001/006  
D221/D302

On the theory of ...

where  $\bar{S}^0$  is the mean resistance of micro-destruction in the region of elastic deformations;  $Q$  is a constant coefficient of proportionality of the material;  $\sigma_2 = 1/2 (\sigma_1 - \sigma_3)$ ,  $\sigma_1 \geq \sigma_2 \geq \sigma_3$  are the main macroscopic stresses;  $\sigma_y$  is the macroscopic yield limit of tangent stresses. In cyclic loading, the local repeated plastic deformations reduce the destruction resistance of II type. The author applies the above equation to the case of an average resistance to cyclic loading, and in particular, for symmetrical  $\sigma_{2a} = \sigma_{2max}$ . The section of the macro-element is then assumed as being divided into areas equal to the average size of grains, splitting also the interacting forces, with the resulting vectors of stresses, type II. This allows the plotting of a curve giving the density of stress distribution. The dispersion of resistance of different areas is then determined. Mathematical analysis provides the equation for the probability of damage  $q$ . Taking into account the statistical criterion of macroscopic damage  $q = q_c$ , the equation of the limit surface of fatigue macro-destruction due to main stresses of type I, is evolved. The limit of type I fatigue for complex macroscopic stresses is then considered which results in Veler curves. The macro-

Card 2/4

39370

S/572/61/000/007/001/006  
D221/D302

On the theory of ...

scopic fatigue limit decreases with larger amount of tests in the case of simple loading. For comparison of limit surfaces of damage due to macro-fatigue with the experimental data as well as generalization of results, dimensionless quantities are introduced. The number of parameters determined by results of fatigue tests is rationally reduced, when it is possible to assume  $\sigma_{sa} = \sigma_y$ , where  $\sigma_y$  is the yield limit for single loading. Consequently the parameters can be determined by fatigue tests with single axis stress condition. In the case of a symmetrical cycle of loading the asymmetry of limit surface is not revealed, although the resistance of material on tension is usually lower than on compression. The pulsating cycle indicates, however, the actual form of limit surface of fatigue damage.

Mathematical analysis proposed by the author is in good agreement with practice. The functional relationship between the amplitude of average cycle stress and fatigue limit is designated as the diagram of limit stresses, when only a single axis strain of type I is considered. The statistical criterion of strength allows deduction of the above diagram for any complex stress condition to be made. The equation obtained contains parameters that do not depend on the average cycle stress, and therefore, the curve

X

Card 3/4

30370

S/572/61/000/007/001/006  
D221/D302

On the theory of ...

of limit stresses is a straight line. Specific numerical examples are also given. There are 3 figures and 8 Soviet-bloc references.

X

Card 4/4

OSTROUMOV, Vladimir Pavlovich; KARPUNIN, Vasilii Aleksandrovich; BERMISHEV,  
A.V., kand. tekhn. nauk, retsenzent; VOLKOV, S.D., kand. fiz.-mat.  
nauk, red.; DUGINA, N.A., tekhn. red.

[Increasing the dynamic strength of springs] Povyshenie dinamicheskoi  
prochnosti pruzhin. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.  
lit-ry, 1961. 110 p. (MIRA 14:10)  
(Springs (Mechanism))

PHASE I BOOK EXPLOITATION

SOV/4598

Volkov, Sergey Dmitriyevich

Statisticheskaya teoriya prochnosti (Statistical Theory of the Strength of Materials) Moscow, Mashgiz, 1960. 176 p. 5,000 copies printed.

Reviewer: Ya. B. Fridman, Professor, Doctor of Technical Sciences; Executive Ed. (Ural Siberian Department, Mashgiz): T.M. Somova, Engineer; Tech. Ed.: N.P. Yermakov.

PURPOSE: This book is intended for mechanical engineers, metallographers, and designers.

COVERAGE: The book deals with the development and implementation of the modern statistical theory of strength of materials; it attempts to generalize special knowledge from statistics, mathematics, and properties of materials, expounded in current scientific literature, and apply it to problems in machinery construction. The following Soviet scientists, who contributed to the statistical theory of the strength of materials, are mentioned: N.N. Afanas'yev, T.A. Kontorova, Ya. I. Frenkel', N.N. Davidenkov, P.O. Pashkov, Vitman, Ye.M. Shevandin, B.B. Chechulin, P.A. Rebinder, S.V. Serensen, Ya. B. Fridman,

Card 1/5



## Statistical Theory of the Strength (Cont.)

SOV/4 598

N.K. Snitko, M.V. Yakutovich, V.A. Pavlov, Kolesnikov, F.P. Rybalko, V.D. Kuznetsov, L.I. Vasil'yev, and Yu. I. Yagn. The author thanks Academicians Yu. N. Rabotnov and A.N. Kolmogorov. There are 135 references: 106 Soviet (including 6 translations), 22 English, 5 German, 1 Dutch, and 1 French.

## TABLE OF CONTENTS:

Foreword	3
Ch. I. A Microscopically Heterogeneous Medium	5
1. A linearly elastic medium, microscopically heterogeneous	5
2. Stresses, deformations, and resistances in a microscopically heterogeneous medium	7
3. Potential energy of elastic deformations	13
4. Distribution of microscopic stresses and deformations	18
5. Distribution of elasticity constants in a quasi-isotropic medium	23
6. A quasihomogeneous medium	28
7. Elastic-plastic deformations in a normal isotropic medium	33
Ch. II. Boundary Surfaces of Plasticity	47
1. Boundary surfaces of plasticity in plastic media	47

~~Card 2/5~~

VOIKOV, S.D.

Kinetics of disintegration and the scale effect. *Zav.lab.* 26  
no.3:323-329 '60. (MIRA 13:6)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.  
(Materials--Deterioration)

VOLKOV, Sergey Dmitriyevich; FRIDMAN, Ya.B., prof., doktor tekhn.nauk,  
retsensent; YERMAKOV, N.P., tekhn.red.

[Statistical theory of the strength of materials] Statisticheskaya  
teoriya prochnosti. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.  
lit-ry, 1960. 175 p. (MIRA 13:7)  
(Strength of materials)

*VOLOKOV, S.D.*

SOV/2355

2A(6)

Al'manach nauch USSR

*Khuzhurye problemi prochnosti tvorstva i raznitsy* (Some Problems in the Strength of Solids) Collection of Articles Moscow, Izdatel'stvo AN SSSR, 1979. 306 p. Karta slip knizh. 2,000 copies printed.

Ed. by V. I. Aver'manov; Tech. Ed. by B. S. Pevnev; Editorial Board: V. I. Lofte, Academician G. V. Kurdyumov, Academician S. S. Zhurav, Corresponding Member, USSR Academy of Sciences; A. P. Vitman, Corresponding Member, USSR Academy of Sciences; I. M. G. Litmanovich, Doctor of Technical Sciences, Professor; S. A. Golovin, Doctor of Physical and Mathematical Sciences, Professor; B. S. Lofte, Doctor of Technical Sciences, Professor; B. S. Lofte, Candidate of Technical Sciences (Sputy Nary. M.).

Purpose: This book is intended for construction engineers, technologists, physicists and other persons interested in the strength of materials.

Coverage: This collection of articles was compiled by the Odessa Polytechnical Institute and the Department of Physical and Mathematical Sciences and the Fril'man Institute of Applied Physics, Institute of Applied Physics, Academy of Sciences, USSR] in connection of the 80th birthday of Nikolay Nikolayevich Davidenko, member of the Ukrainian Academy of Sciences, founder and head of the Odessa Institute of Applied Physics (Department of the Strength of Materials) at the Institute of Applied Physics (Department of the Strength of Materials) of the Institute of Applied Physics (Department of the Strength of Materials) of the Odessa Polytechnical Institute (Department of Applied Physics, USSR). The articles deal with the strength of materials, phenomena of imperfect elasticity, creep, brittleness, hydrogen embrittlement, cold brittleness, influence of deformation speed on the mechanical properties of materials, fatigue of metals and general problems of the strength, plasticity, and mechanical properties of materials. Numerous personalities are mentioned in the introduction.

Editor: S. I. V. Kolomoyskiy, and B. S. Lofte. Subject of Size of Test Area in the Strength Under Repeated Stresses	603
Sivina, S.V. Accumulation of Fatigue Damage in Iron With Globular Graphite During Barbed Bending	273
Podolskiy, B.A., and Yu. B. Fridman. Sensitivity of Metals to Cracks	280
Il'inskiy, P. I., L. I. Ryzhenko, and Yu. B. Fridman. Kinetics of Deformation for Bagnone Processes in Connection With the Reserve of Elastic Energy	327
Likhachev, R. I. (Industrial Institute Isam' Kuznetsov, Kuznetsk). Determination of the Rupture Strength of a Practically Deformed Metal	312
Fel'd, A. B. (Gos. Polytechnical Institute Isam' S. M. Kirov, Kirov). Principles of the Statistical Theory of Strength	345
Kuznetsov, S. P., and I. S. Aridov (Sverdlovsk Polytechnical Institute Isam' Mendeleev, All-Union Scientific Research Institute of Mechanical Engineering, Sverdlovsk Branch). Mechanical Properties of Sintered Steel Under Bimodal Tension	324
Vitman, A. P., G. M. Zhurav, B. S. Lofte, and V. P. Rubt (Institute of Applied Physics, Academy of Sciences, USSR, Leningrad). Problem of Increasing the Strength of Glass	340
Zheleznyakov, M. A., and L. G. Zhukovskiy (Institute of Applied Physics, Academy of Sciences, Leningrad). Measuring Residual Stresses in Tapered Glasses by the Mechanical Method	348
Bobokhin, K. L. (Institut Kristallografi AN SSSR, G. Kostov-Crystallography Institute, Academy of Sciences, USSR, Moscow). Some Findings on the Destruction of Bodies Under the Action of Internal Stresses	371
Loftin, V. A., and V. P. Rubt (Institute of Applied Physics, Academy of Sciences, USSR, Leningrad). State of Development of Brittleness Cracks in Glass and Resin	367
Reynolds, C. E., and G. I. Rabinovich (Crystallography Institute, Academy of Sciences, USSR, Moscow). Effect of the Type of Stressed State on Flow-Curve Parameters of Some Plastics	375

AVAILABLE: Library of Congress

ASATUROV, A.A.; KOMAROVA, V.A.; RYBALKO, F.P.; VOLKOV, S.D.

Moments of plastic microdeformations. Fiz. met. i metalloved.  
17 no.5:744-749 My '64. (MIRA 17:9)

1. Ural'skiy politekhnicheskiy institut imeni Kirova i Ural'skiy  
gosudarstvennyy universitet imeni Gor'kogo.

~~VOLKOV-S.G.~~; YAKOVLEV, L.Ya.

Development is taking place in every field of communication and service to the public is improving. Vest. sviazi 21 no.3:17-19 Mr '61.  
(MIRA 14:6)

(Telecommunication)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

A feeling of the new. Vest. svyazi 22 no.9:27 S '62.  
(MIRA 15:9)  
(Odessa--Postal service)

AUTHORS: Volkov, S.G., Yakovlev, L.Ya. SOV/111-58-3-16/29

TITLE: The Communication Workers of Elektrostal' (Svyazistki Elektrostali)

PERIODICAL: Vestnik svyazi, 1958, Nr 3, pp 21 - 23 (USSR)

ABSTRACT: The work of the female communication workers of the town Elektrostal' is praised. Some of the key positions of the local post office and telephone exchange are occupied by females. There are eight photos.

Card 1/1



AUTHORS: Volkov, S.G., Yakovlev, L.Ya. SOV/111-58-12-27/38

TITLE: The Improvement of the Cultural and Political Level of Communication Workers (Povysheniye kul'turnogo i politicheskogo urovnya svyazistov)

PERIODICAL: Vestnik svyazi, 1958, Nr 12, pp 28-29 (USSR)

ABSTRACT: The article deals the work conducted by the management of the 7th Post Office for increasing the cultural and political level of the employees.  
There are 2 photos.

Card 1/1

VOLKOV, S.G.; YAKOVLEV, L.Ya.

The present level of telecommunication enables us to serve the  
people efficiently. Vest. sviazi 22 no.11:17-20 N '62.  
(MIRA 16:12)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

A well organized telecommunication department. Vest. sviazi 24  
no.10;23-26 0 '64. (MIRA 17/12)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Agricultural workers should be provided with every means of communication. Vest.sviazi 25 no.2:17-20 F '65.

(MIRA 18:6)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Important is the cultivation of a communist outlook on  
work. Vest. sviazi 25 no.6:11-14 Je '65. (MIRA 18:11)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Work conscientiously and render high-quality service to the public.  
Vest. sviazi 25 no.9:23-26 S '65. (MIRA 18:9)

VOLKOV, S.G. ; YAKOVLEV, L.Ya.

In a consolidated district. Vest. sviazi 23 no.12:25-27 D '63.  
(MIRA 17:2)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Improving the cultural and political standards of communication personnel. Vest.sviazi 18 no.12:28-29 D '58. (MIRA 11:12)  
(Telecommunication--Employees)



SOV/111-59-1-29/35

AUTHORS: Volkov, S.G., Yakovlev, L.Ya.

TITLE: A Well-Organized Communication Enterprise in the Country  
(Kul'turnoye predpriyatiye svyazi na sele)

PERIODICAL: Vestnik svyazi, 1959, Nr 1, pp 30 - 34 (USSR)

ABSTRACT: The article describes in detail the installations and operations of the communications center in Novo-Petrovskoye, a rural center in the Moscow Oblast'. The communications center is headed by V.I. Meleshko. The telephone office at present deals with 300 automatic dials with ample room for more. The ST-35 apparatus permits telephone calls and telegraphic communication with Moscow and other Soviet cities. Inter-area communications offices of the district each have 20 automatic dials which includes the village councils, the sovkhozes and kolkhozes. More of such inter-area offices are being established. The Novo-Petrovskoye communications center also contains a 2-km radio rediffusion station with about 4,500 individual and community subscribers. There

Card 1/2

SOV/111-59-1-28/35

A Well-Organized Communication Enterprise in the Country

are also 400 TV sets in the district. The mail processing system is described in detail. The center's party organization consists of only 13 party members and is headed by the deputy office head I.O. Stuchilov. There are 10 photos.

Card 2/2

6(7)

SOV/111-59-5-20/32

AUTHORS: Volkov, S.G., Yakovlev, L.Ya.

TITLE: In the Interests of the Population

PERIODICAL: Vestnik svyazi, 1959, Nr 5, pp 22-24 (USSR)

ABSTRACT: The article contains a description of the Zhukovskiy post office and its communication facilities. Due to a considerable growth of Zhukovskiy since 1953, telegraph communications facilities have been automated. Moscow and three other city offices may be contacted using the high-speed equipment "ST-35". An automatic telephone exchange was built last year which ultimately have a capacity of 6000 numbers. The radio rebroadcasting station is equipped with two TU-5-3 units, having a total power of 10 kw. There are about 7000 wire broadcast receivers in Zhukovskiy which are serviced from the rebroadcasting station. Further, there are 4056 TV sets and 6687 radio receivers. For all communication facilities there is one common generator hall and one common

Card 1/2

In the Interests of the Population

SOV/111-59-5-20/32

battery hall. The Zhukovskiy post office is headed by M.U. Filippov. The post office workers often submit suggestions for improvements. About every third communication worker has submitted one suggestion. Great attention is paid to proper training of the post office employees. There are 6 photographs.

Card 2/2

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Importance of educating the people. Vest.sviazi 21 no.10:20-22  
0 '61. (MIRA 14:10)

(Postal service)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Not being a laggard. Vest. sviazi 25 no.4:21-22 Ap '65.

(MIRA 18:6)

VOLKOV, S.G.; KIYASHKO, A.V.

A leading radio center. Vest. svyazi 22 no.5:10-12 My '62.  
(MIRA 15:5)  
(Moscow--Radio stations)

VOIKOV, S.G.; YAKOVLEV, L.Ya.

Mail is carried by airplanes. Vest. sviazi 20 no.8:26-28 Ag'60.  
(MIRA 13:10)

(Air mail service)



VOLKOV, S.G.; YAKOVLEV, L.Ya.

An important aspect in rendering good service to the public. Vest.  
sviazi 22 no.2:28-31 F '62. (MIRA 15:2)  
(Postal service)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Cultural communication establishment in the countryside. Vest.  
sviazi 19 no.1:30-34 Ja '59. (MIRA 12:1)  
(Moscow Province--Communication and traffic)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Cultural communication office. Vest.sviazi 18 no.1:24-27 Ja '58.  
(MIRA 11:1)

(Telecommunication)  
(Postal service)

VOLKOV, S.G., inzhener; KIYASHKO, A.V., inzhener.

Without a single technical breakdown. Vest.sviazi 15 no.12:21-23  
D '55. (MLBA 9:3)

(Moscow--Radio broadcasting)

VOLKOV, S.G.

USSR/ Miscellaneous - Technical training programs

Card 1/1 Pub. 133 - 15/19

Authors :Volkov, S. G.

Title :Training personnel of the (Leningrad) Communications Office

Periodical : Vest. svyazi 1, page 26, Jan 1955

Abstract : The personnel training system, adopted by the Leningrad Communications Office is discussed. The efficiency of the Leningrad office was gradually increased with the introduction of the personnel training system. Illustration.

Institution: .....

Submitted: .....

VOLKOV, S.G.

Better service for the public; (experience of the Kiev long  
distance telephone station). Vest.sviazi 15 no.2:26-27 F'55.  
(Kiev--Telephone stations) (MIRA 8:3)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Communications women of Elektrostal'. Vest.sviazi 18 no.3:21-23 Nr  
'58. (MIRA 11:4)

(Elektrostal'--Telecommunication)  
(Elektrostal'--Postal service)

VOLKOV, S. G.

USSR/ Electronics - Telephone communication

Card 1/1 Pub. 133 - 15/18

Authors : Volkov, S. G.

Title : Increase of culture by serving the people

Periodical : Vest. svyazi 2, 26 - 27, Feb 1955

Abstract : Brief report is presented on the innovation introduced by the Kiev long-distance telephone office (installation of pay-telephone booths in various parts of the city) and the economical advantages derived therefrom. Illustration.

Institution: .....

Submitted: .....



VOLKOV, S.G.; YAKOVLEV, L.Ya.

~~SECRET~~  
During the election campaign. Vest. svyazi 17 no.3:24-26 Nr '57.  
(Telecommunication) (MLRA 10:4)

VOLKOV, S.G.

The engineering department of the Moscow municipal telephone system.  
Vest. sviazi 17 no.7:8-9 J1 '57. (MLRA 10:8)  
(Moscow--Telephone)

VOLKOV, S.G.

VOLKOV, S.G.

From the experience of the Vilnius interurban telephone  
exchange. Vest.sviazi 14 no.7:21-23 JI '54. (MLRA 7:7)  
(Vilnius--Telephone stations)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

The mail is being transported by air. Vest. sviazi 2/  
no.8:16-19 Ag '64. (MIRA 17:10)

VOLKOV, S. G.

USSR/Miscellaneous - Communications

Card 1/1 : Pub. 133 - 13/20

Authors : Volkov, S. G.

Title : Experiences of the inter-city telephone station in Vilno

Periodical : Vest. svyazi 7, 21-23, July 1954

Abstract : The most interesting measures and actions taken by the Vilno inter-city telephone station, in its competitive struggle for priority in the All-Union socialistic competition of communications workers, are described. Table; drawings; illustration.

Institution : The Inter-City Telephone Station, Vilno

Submitted : ...

, S.O.

District communications office operating under new conditions. Vest.  
sviazi 14 no.4:22-23 Ap '54. (MIRA 7:6)  
(Telecommunication)

VOLKOV, S.G.

The practice of combined servicing of cable trunk lines and overhead communication systems. Vest.sviazi 15 no.9:21-22 S'55. (MLRA 8:12)  
(Electric lines) (Telecommunication)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Creative initiative. Vest. svyazi 23 no.3:30-32 Mr '63.(MIRA 16:3)  
(Moscow—Telecommunication) (Moscow—Postal service)



VOLKOV, S.G.; YAKOVLEV, L.Ya.

It will benefit agricultural administration and the rural population.  
Vest. svyazi 23 no.2:6-9 F '63. (MIRA 16:2)  
(Telephone) (Postal service)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

On air mail routes. Vest. svyazi 21 no.7:25-27 J1 '61.

(MIRA 16:7)

(Air mail service)

VOLKOV, S.G.; KIYASHKO, A.V.; YAKOVLEV, L.Ya.

Radio center deserving a high mark for its engineering  
excellence. Vest. sviazi 24 no.5:29-32 My '64.

(MIRA 17:6)

VOLKOV, S.G.; YAKOVLEV, L.Ya.

Public interests are our primary concern. Vest. sviazi 25  
no 11:24-27 N '65. (MIRA 18:12)

**VOLKOV, S.I.**  
*per* 25

100 AND 1000 GRAMS      PROCESSES AND PROPERTIES INDEX      100 AND 470 GRAMS

The developing velocity of naphthionate with tetrazotized blanisidine in the production of Benzopurpurin 10 B. S. P. Filipovich and S. I. Volkov. *Sinteticheskaya khrimika* *Novaya* *Trava*, 1931, No. 1, 15-17; *Chem. Zentr.*, 1932 1, 1157. An excess of 22.5% naphthionate had the most advantageous effect on the velocity of this reaction.

M. G. Alouev

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

100000 22      100000 22      100000 22      100000 22

VOLKOV, S.I.

Academy of Sciences of the U.S.S.R.

Coordinating work in languages and literature (at the joint conferences of the  
Bureaus of History and Philosophy and the Literature and Language Sections).  
Vest. An SSSR 22, No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

VOLKOV, J.I.

USER/ Miscellaneous - Conferences

Card 1/1      Pub. 124 - 33/40

Authors      :    Volkov, S. I.

Title        :    ~~.....~~  
The history of the Baltic nations

Periodical   :    Vest. AN SSSR 1, 117-119, Jan 1955

Abstract    :    Briefs are presented on the scientific conferences held in  
October 1954 in Tallinn (Estonia), at which the historical problems  
of the Baltic nations - Lithuania, Latvia, Estonia - were discussed.

Institution   :    .....

Submitted    :    .....

VOLKOV, S. I.

DECEASED

Medicine

See ILC



VOLKOV, S.I., kand. ekon. nauk, red.; MAL'URKOVICH, M., red.

[Accounting with computers; practice in machine accounting in enterprises] Budgalterskii uchët s primeneniem uchetykh mashin; opyt mekhanizatsii ucheta na predpriyatiyakh. Moskva, Finansy, 1964. 128 p.

(MIRA 17:11)

VOLKOV, S.I.; RAPOPORT, M.M.; RAKITINA, Ye.D., red.

[Calculating technique and machine accounting] Tekhnika  
vychislenii i mekhanizatsiia ucheta. Moskva, Izd-vo  
"Kolos," 1964. 319 p. (MIRA 17:6)

IVANOV, Yuriy Viktorovich; VOLKOV, S.I., detn., retirement;  
LASHIN, A.N., retsuzhen; KAKHAYEV, M.S., red.

[Planning and accounting ing in machine accounting sta-  
tions] Planirovanie i uchet na mashinoschetnykh ustanov-  
kakh. Moskva, Statistika, 1964. 66 p. (MIRA 17:11)

1. Direktor Pervoy moskovskoy fabriki mekhanizirovannogo  
scheta (for Lashin).

VOLKOV, S. I.  
MACHINERY--DESIGN AND CONSTRUCTION

DECEASED  
c/1964

1964

SOV/30-58-6-44/45

AUTHOR: Volkov, S. I., Candidate of Historical Sciences

TITLE: "40 Years of Soviet Science in Uzbekistan " ("40 let sovetskoy nauki v Uzbekistane ")

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 6, pp. 144 - 145 (USSR)

ABSTRACT: The author discussed the book by Kh.M.Abdullayev: "40 Years of Soviet Science in Uzbekistan ." which had been published in Tashkent by the AS, Uzbek SSR, 1958. The book has 216 pages, had a first edition of 2.000 volumes; price: 5,80 Roubles.

1. Literature--USSR

Card 1/1

VOLKOV, S.I., kand. ist. nauk

"Forty years of Soviet science in Uzbekistan" by Kh.M.Abdullaev.  
Reviewed by S.I.Volkov. Vest'. AN SSSR 28 no. 6:144-145 Ja '58.

(MIRA 11:7)

(Uzbekistan--Science)  
(Abdullaev, Kh.M)

VOLKOV, S. M.

6764. Volkov, S. M., Kalashnikov, K. Ya. i Shapiro, L. D.  
Prótravlivaniye semyan sel'skokhozyaystvennykh kyl'tur. M., S.L.,  
Sel'khozgiz, 1954. 99 s. s. 111. 20 sm. 25.000 ekz. 1 r. 35 k.  
--(55-2321) 631.531.17

SO: Knizhnaya Letopis' No. 6, 1955

1. VOLKOV, S.M.
2. USSR (600)
7. Bolezni i Povrezhdeniya Klubney Kartofelya (Diseases and Injuries of the Tuberous Potato), Under the Editorship of M.K. Khokhryakov, 64 pp, Leningrad, 1951.

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.



VOLKOV, S.M.

N/5  
632.4  
.v91

VOLKOV, S. M.

Al'bom vreditel'ey i bolezney sel'skokhozyaystvennykh kul'tur;  
nechernozemnoy polosy yevropeyskoy chasti SSSR (Album of pests and  
diseases of agricultural crops, by) S. M. Volkov (1 dr.) Moskva,  
Sel'khozgiz, 1955. 486 p. illus., tables.

VOLNOV, S.M.

Mifelian conglomerates on the eastern slope of the Arctic Urals.  
Mat. VSEENI Ob. ser. no. 8:39-42 '48. (MIRA 11:4)  
(Ural Mountains--Geology, Stratigraphic)

7-11 1948

110-58-5-2/25

AUTHORS: Baranov, I.B. and Volkov, S.N., Engineers

TITLE: Hermetic Sealing of Aluminium Containers for Capacitors  
by Cold Welding (Germetizatsiya alyuminiyevykh korpusov  
kondensatorov kholodnoy svarkoy)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Vol 29, Nr 5,  
pp 5 - 9 (USSR).

ABSTRACT: It is very advantageous to use aluminium containers for hermetically-sealed paper and metallised-paper capacitors, because the containers can be made by the economic process of impact extrusion. One of the difficulties of using aluminium containers has been that of making a hermetic joint to the lids. This can be done by cold welding but an essential condition is that the metal surfaces which are brought together must be free from the usual oily and oxide films. Some metals, including aluminium, have a brittle oxide film that can be broken by plastic deformation. Deformation is therefore necessary when cold-welding. If made of aluminium not thicker than 2 mm, the containers and lids of most capacitors can be joined together by the simplest of cold welding procedures, as illustrated in Figure 1, without preliminary compression of the parts to be welded. However, the quantity of flash left round the weld edges makes the normal method of cold welding

Card1/5

110-58-5-2/25

Hermetic Sealing of Aluminium Containers for Capacitors by Cold  
Welding

unsuitable for capacitors. A method better suited to capacitors was therefore developed by I.B. Baranov and S.M. Taz'be. When cold-welding aluminium not only are the butt ends welded but welding also penetrates into the peripheral zone, as shown in Fig.2. With this method of welding most of the flash from the container and lid are cut off. When the dies are pressed into the metal, welded zones are formed on both sides of the perimeter of the working parts of the tools. The external welded zone is cut off and, therefore, to reduce the welding pressure the dies should be relieved so that the external supporting parts clear the surface of the product. It has been found that when sealing a container 0.5 mm thick to lids 1 mm thick, the welding force is 100 - 125 kg/mm of weld periphery. When the thickness of the lid is 2 mm the force required is 150 - 175 kg/mm weld periphery. Mechanical cleaning with a steel brush is very satisfactory. Since oxide films do not matter, parts can be cleaned some time before use provided they do not get dirty. Metal dust formed during brushing must be kept out of the containers.

Card2/5

110-58-5-2/25

Hermetic Sealing of Aluminium Containers for Capacitors by Cold  
Welding.

Satisfactory results were obtained when the mating surfaces were washed with pure solvents such as ethyl alcohol or benzol, but the joint failure rate was much higher than when mechanical cleaning was used. Parts can also be cleaned by heating to 350 - 400 °C in air for 30 - 40 min. This method is suitable for cleaning the lids of capacitors, provided they do not carry insulators.

In many types of capacitors, one of the electrodes is connected to the container. This can be done by catching a copper or aluminium lead between the container and the lid during the process of welding the lid in place.

When a flat lid is cold-welded to a container, it becomes buckled which may impair the hermetic sealing of the insulator; the effect is shown in Fig.3. As a remedy, the author has developed an inset lid, illustrated in Figure 4. Here, the part surrounding the insulator remains flat during welding. Moreover, the lid is positively located which is convenient during high-speed production. The thickness of the lid has an important influence on the strength of the product, as will be seen from the tabulated data for lids of different thickness.

Card3/5

Hermetic Sealing of Aluminium Containers for Capacitors by Cold  
Welding 110-58-5-2/25

A large number of aluminium capacitor containers were cold-welded and tested. Temperature-cycling tests were made on samples at temperatures ranging from + 150 °C to - 60 °C. Vibration tests were made at 50 cps with an acceleration of 15 g for ten hours. Capacitors were dropped on to a cement floor from a height of 1 m. In all these tests the results were satisfactory. Type-tests were made on an experimental batch of 150 electrolytic and 225 metallised-paper capacitors of the types illustrated in Figures 5 and 6, respectively. The tests included ageing at + 60 °C, temperature-cycling at + 60 °C and three hours' vibration at 50 c.p.s. with an acceleration of 15 g. These tests did not impair the hermetic sealing.

The "Elektrik" Works developed semi-automatic machines, type MKhSK-1 for the cold-welding operation. The machine is illustrated in Figure 7 and can handle round containers up to 50 mm diameter and square containers up to 45 x45 mm with a limiting height of 85 mm. The machine is briefly described; its output is 750 welds/hour. There are 7 figures, 1 table and 2 Soviet references.

Card4/5

Hermetic Sealing of Aluminium Containers for Capacitors by Cold  
Welding

110-58-5-2/25

ASSOCIATIONS: VNIIESO and Zavod "Elektrik" ("Elektrik" Works)

Card 5/5

SIDORENKO, A.V., glav. red.; ZORICHEVA, A.I., red.; VOLKOV, S.N.,  
soredaktor; SOLOMATINA, Z.D., red. izd-va; VLASOV, I.S.,  
red.izd-va; GUROVA, O.A., tekhn. red.

[Geology of the U.S.S.R.] Geologiya SSSR. Glav.red.A.V.  
Sidorenko. Moskva, Gosgeol'tekhzdat. Vol.2. [Archangel  
and Vologda Provinces and the Komi A.S.S.R.] Arkhangel'-  
skaia, Vologodskaia oblasti i Komi ASSR. Pt.1.[Geological  
description] Geologicheskoe opisanie. Red. A.I.Zoricheva.  
1963. 1077 p. (MIRA 16:12)

(Archangel Province--Geology)

(Vologda Province--Geology)

(Komi A.S.S.R.--Geology)



MEL'NIKOV, A.S.; VOLKOV, S.N.; YEROSHEVSKAYA, R.I.

Silurian and Devonian of the Northern Sos'va region. Trudy VSEGEI  
86:87-101 '62. (MIRA 17:11)

VOLKOV, S. N.

Lower and middle Devonian in the northern part of the eastern slope  
of the Urals. Trudy Geol. muz. AN SSSR no.2:101-135 '60.

(MIRA 13:10)

(Ural Mountains--Geology, Stratigraphic)

VOIKOV, Sergey Nikolayevich; KUZNETSOV, S.S. doktor geol.-miner.nauk, prof.,  
otv.red; KULIKOV, M.V., red.isd-va; ZENDEL', M.Ye., tekhn.red.

[Middle Paleozoic in the northern outskirts in the Nizhniy Tagil  
synclinalium] Srednii paleozoi severnoi okrainy Nizhnetagil'skogo  
sinklinorija. Moskva, Izd-vo Akad. nauk SSSR, 1960. 93 p. (Akademiia  
nauk SSSR. Geologicheskii muzei. Trudy, no.4). (MIRA 13:8)  
(Nizhniy Tagil region---Geology, Stratigraphic)

ACC NR: AP6025609

(N)

SOURCE CODE: UR/01.13/66/000/013/0050/0050

INVENTORS: Volkov, S. N.; Makar'in, V. P.; Palevich, K. K.; Rubaylo, G. M.;  
Gerasimova, L. S.; Ryazantseva, V. M.; Andreyeva, I. I.; Semenova, A. G.

ORG: none

TITLE: A machine for contact spot welding. Class 21, No. 183300

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 50

TOPIC TAGS: welding, spot welding, welding technology, welding equipment

ABSTRACT: This Author Certificate presents a machine for contact spot welding. The machine contains a frame and welding transformers, each of which is electrically connected to a group of welding guns (see Fig. 1). To increase the productivity, the welding transformers together with the corresponding group of welding guns are mounted on the vertical planes of plates which move under the action of a driving mechanism located on the frame. The movement takes place along the horizontal guides also located on the frame. Rods attached to one of the plates serve as auxiliary guides for another plate. These rods are intended for fixing the plates

Card 1/2

UDC: 621.791.763.1.037

ACC NR: AP6025609

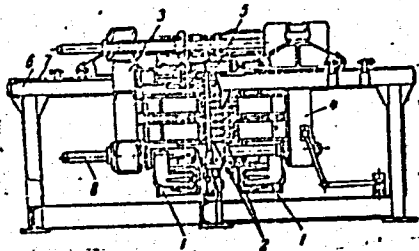


Fig. 1. 1 - welding transformers; 2 - welding guns; 3 and 4 - vertical plates; 5 - driving mechanism for plates; 6 - frame; 7 - guides; 8 - rods

in their original position prior to welding. Orig. art. has: 1 figure.

SUB CODE: 13/

SUBM DATE: 16Jun65

Card 2/2

AKIMOV, N.I.; VOLKOV, S.P.; KONOVALOVA, N.A.; OSINOVSKAYA, R.I.; PLISKO, Yu.Yu.; SEVEROV, M.N.; STEPANOV, L.A.; SHCHUKIN, V.Ya.; VORONICHEV, M.P., red.; TSARENKO, A.P., red.; VERINA, G.P., tekhn.red.

[International railroad transportation] Mezhdunarodnye zheleznodorozhnye soobshchenia. Pod red. M.P.Voronicheva. Moskva, Gos. transp.zhel-dor.izd-vo, 1959. 242 p. (MIRA 13:2)  
(Railroads)

VOLKOV, S.P., inzh.; KOLPIKOV, N.V., inzh.; NABATYAN, M.P., inzh.

Performance of double-disk furrow openers at increased speeds.  
Mekh. i elek. sots. sel'khoz. 19 no.6:7-9 '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii  
sel'skogo khozyaystva.

(Drill (Agricultural implement))

VASIL'YEV, A.V., kand.tekhn.nauk, VOLKOV, S.P.

Using a strain-measuring shoe in measuring the reaction of ground  
to the crawler. Trudy NATI no.20:72-88 '60. (MIRA 13:7)

(Strain gauges)

(Crawler tractors--Dynamics--Measurement)



VOLKOV, S. P.

25488. Grafik Dlya Fostroyennya Linin Peresecheniya Mnogogrannykh Poverkhnostey.  
Izvestiya Rost. In-ta Inzhenerov Zh.-D. Transporta, VYP. 14, 1949, s. 43-53.

SO: Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

VOLKOV, S.P.

25488 VOLKOV, S.PL, Grafik Dlya Postroyennya linin perese .heniya mnogogrann ykh poverkhnostey. izvestiya rost. in-ta inzhenerov zh-d. Transporta, vyp. 14, 1949, s. 43-53

SO: Letopis' Zhurnal'nykh Statey, vol 34, Moskva, 1949

VOLKOV, S. P.

25488

Grafik Dlya. Povtroyeniya Linii Peresecheriya. Mnogogrannykh Poverkhnostei. Izvestiya  
Rost. In-ta Inzhenerov Zh.-D. Transporta. VIP. 14, 1949, S. 43-53

SO: LETCFIS' No. 34

BACHURIN, N.I., inzh.; VOLKOV, S.S., inzh.; GORODETSKIY, S.S., prof., doktor tekhn. nauk; GUSEV, S.A., dotsent, kand. tekhn. nauk; ZHUKHOVITSKIY, B.Ya., dots., kand. tekhn. nauk; IVANOV-SMOLENSKIY, A.V., dots., kand. tekhn. nauk; KIFER, I.I., dots., kand. tekhn. nauk; KORYTIN, A.A., starshiy pre-podavatel'; KULIKOV, F.V., dots.; NIKULIN, N.V., dots., kand. tekhn. nauk; PODMAR'KOV, A.N., dots.; PRIVEZENTSEV, V.A., prof., doktor tekhn. nauk; RUMSHINSKIY, L.A., dots., kand. fiz.-mat. nauk; SOBOLEV, V.D., dots., kand. tekhn. nauk; URLAPOVA, M.N., inzh.; TIKHOMIROV, P.M., dots., kand. tekhn. nauk; FEDOROV, A.A., dots., kand. tekhn. nauk; CHUNIKHIN, A.A., dots., kand. tekhn. nauk; CHILIKIN, M.G., prof., glav. red.; GOLOVAN, A.T., prof., red.; GRUDINSKIY, P.G., prof., red.; PETROV, G.N., prof., doktor tekhn. nauk, red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., inzh., red.; BORUNOV, N.I., tekhn. red.

[Electrical engineering handbook] Elektrotekhnicheskiy spravochnik. 3., perer. i dop. izd. Pod obshchei red. A.T. Golovana i dr. Moskva, Gosenergoizdat. Vol.1. 1962. 732 p. (MIRA 15:10)

1. Moskovskiy energeticheskiy institut (for Golovan, Grudinskiy, Petrov, Fedoseyev, Chilikin, Antik).  
(Electric engineering--Handbooks, manuals, etc.)

VOLKOV, S. S.

PA 245T25

USSR/Metallurgy - Magnesium Forgings 11 Oct 52

"Possibility of Wide Application of Magnesium Forgings in Machine Construction," S. I. Gubkin, Active Mem, Acad Sci Belorussian SSR; S. S. Volkov, and L. N. Moguchiy

"Dok Ak Nauk SSSR" Vol 86, No 5, pp 929-931

Deformation of Mg alloys by forging was studied in 1937 at Inst of Gen and Inorg Chem, Acad Sci USSR, and later at Inst of Metallurgy, Acad Sci USSR. It was found that wrought products of light alloys may be substituted by forged Mg alloys. Received 11 Aug 52.

245T25



VOLKOV, S.S.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 28-30, 28 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Gubkin, S.I. Moguchiy, L.N. Savitskiy, L.N. Zatulovskiy, M.I. Mikityuk, V.D. <u>Volkov, S.S.</u> Chirkov, B.F. Imshennik, B.K.	"Deformability of Magnesium Alloys"	Institute of Metallurgy, Academy of Sciences USSR

EO: W-30604, 7 July 1994

*10.1.1957*

Influence of several processes of heat treatment on the tendency to delayed fracture of steels with tensile strength of 120-140 kg./sq. mm. L. M. Pevner, V. E. Salovskii, T. K. Zikova, S. S. Volkov, and Ya. M. Potak. *Metallurg. Obrabotka Metallov* 1957, No. 3, 5-14. — An exptl. study was made of the effect of stress and H on delayed fracture in steel 30EhGSA (0.3% C, 1.0 Mn, 1.0 Si, 1.0 Cr, 0.4 Ni). Plates 2 X 8 X 10 mm. were bent various amts. in the elastic or elastoplastic range and were made the cathode in a 5% NaHSO<sub>4</sub> soln. for 30 min. The max. amt. of bending for which no cracking occurred was tabulated. Hardness in the range 37-40 Rc was produced by a variety of heat-treatments. The surface layer was important in detg. the exptl. behavior. For specimens that had been given the same hardening treatment, tempering in a nondeoxidized salt bath gave a value of more than 6 mm. of bending while tempering in a muffle furnace gave about 2 mm. Fresh salt baths also gave about 2 mm., although well used, deoxidized baths gave values comparable to nondeoxidized baths. The fresh baths produced a surface layer contg. 0.0271 g. N compared to 0.0014 for used baths. When the fresh bath was used at 410° it gave more than 6 mm. of bend because the nitriding process was almost absent. Heating in a muffle furnace, either for hardening or for tempering, gave a low bend value because of the oxide layer produced. Isothermal quenching in salt baths at 390-410° gave the best results. There was considerable variation among heats of steel. Polishing the surface after heat-treatment lowered the bend value in many cases; for isothermal quenching the lowering was from more than 6 mm. down to 2. The above

*112*



VOLKOV, S.S.; UMRIKHIN, P.V.; ARZAMASTSEV, Ye.I.; LUPEYKO, V.

Using manganese limestone in oxygen blowing. Izv. vys. ucheb.  
zav.; chern. met. 8 no.10:52-58 '65. (MIRA 18:9)

1. Ural'skiy politekhnicheskiy institut.

VOLKOV, S.S.; UMRIKHIN, P.V.

Desulfuration of the metal in the oxygen-blown converter process  
at the condition of preliminary desiliconization of cast iron.  
Izv. vys. ucheb. zav.; chern. met. 8 no.2:58 '65.

(MIRA 18:2)

1. Ural'skiy politekhnicheskiy institut.

~~VOLKOV, S. S.~~

Dissertation defended for the degree of Candidate of Philological Sciences  
at the Institute of the Russian Language

"Changes in the Vocabulary of the Commercial Language of the Moscow Russ  
During the First Third of the XVII Century."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

YEVLANOV, N.G.; SOLOV'YEV, V.P.; VOLKOV, S.S.

Manufacture of panels by progressive die stamping in parts.

Kuz-shtam. proizv 4 no.6:4-8 Je '62.

(MIRA 15:6)

(Sheet-metal work)

38215  
S/182/62/000/036/001/004  
D040/D113

1.3000

AUTHORS: Yevlanov, N.G., Solov'yev, V.P., and Volkov, S.S.

TITLE: Panels fabricated by successive sectionwise stamping

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 6, 1962, 4-8

TEXT: Wafer panels of B 95 (V95) aluminum alloy, 12 mm thick, 837 mm long, and 520 mm wide, with 5 mm thick and 22-29 mm high ribs, were stamped in experiments with a new die set on a 2600 t hydraulic press. The mechanical properties of panels exceeded the standard strength requirements, and the metal fiber orientation followed the outline of the ribs. A 13,000 t press would be required for stamping, using conventional dies which shape the entire panel simultaneously. In the experimental die set, the bottom half is the same size as the entire panel and moves a step after each stroke of the narrow top half, thus forming 2 impressions; in this way, panels with 8 impressions in 2 rows were produced in 4 strokes. Detailed description of the die design and operation is illustrated and data on the heating temperature and required specific pressure

Card 1/2

S/182/62/000/006/001/004  
D040/D113

· Panels fabricated by successive sectionwise stamping

is included. Successive stamping in available presses can be used for fabricating wafer panels of over 3 m<sup>2</sup> size; such panels are presently milled from rolled plates. There are 10 figures. X

Card 2/2

SHUMAKOV, L.G., inzh.; VARNAVSKIY, I.N., inzh.; IZOTOV, N.P., inzh.;  
VOLKOV, S.S., inzh.

Conversion of low-carbon, high-temperature molten metal in  
open hearth furnaces. Stal' 22 no.1:37 Ja '62. (MIRA 14:12)

1. Orsko-Khalilovskiy metallurgicheskiy kombinat.  
(Steel-Metallurgy)

LEONOV, A.F.; MOROZOV, A.N.; IVANOV, R.M.; VARHAVSKIY, I.N.;  
TAKHTAYEV, Yu.B.; IZOTOV, N.P.; VOLKOV, S.S.

Smelting of native-alloy steel. Metallurg 6 no.10:20-21  
0 '61. (MIRA 14:9)

1. Orsko-Khalilovskiy metallurgicheskiy kombinat i  
Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.  
(Steel alloys--Metallurgy)



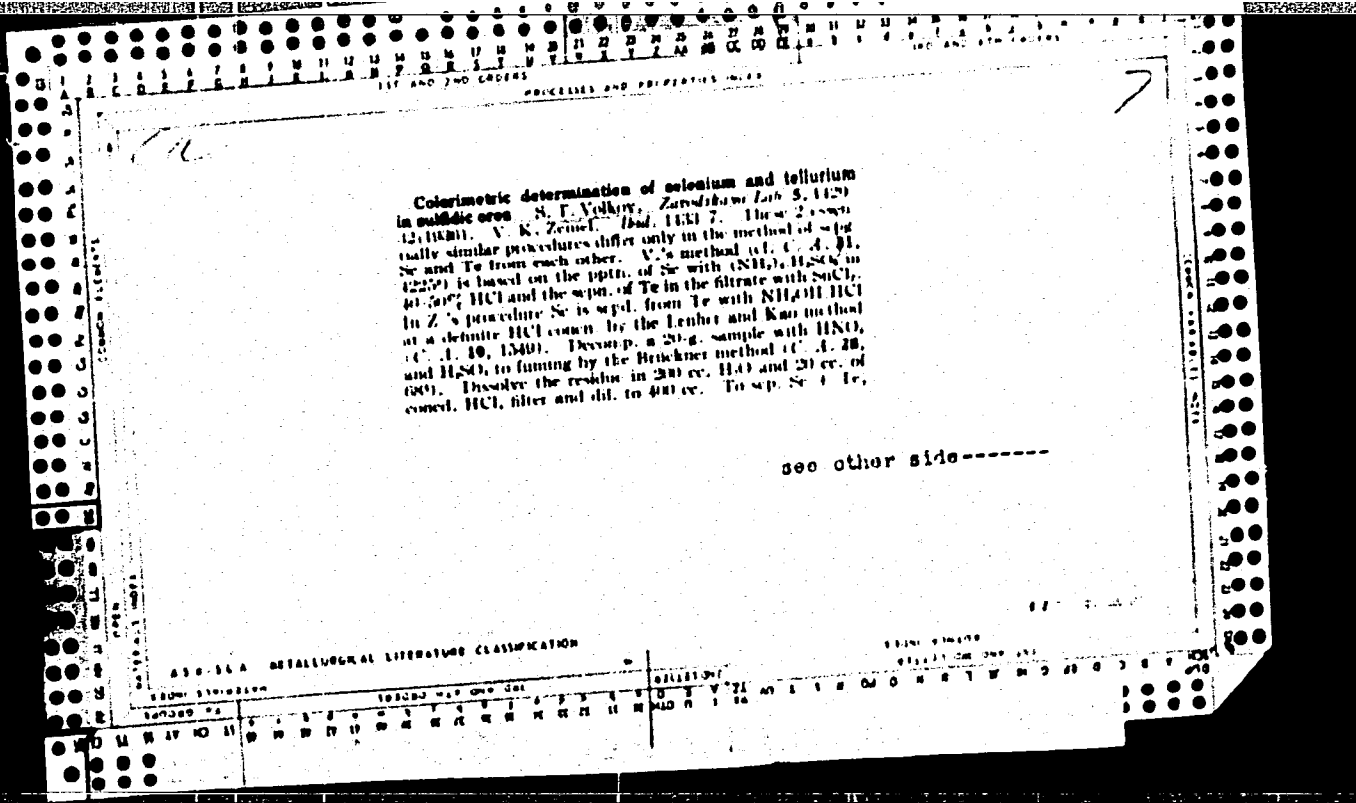
1. SHUROVENKOV, B. G.; VOLKOV, S. T.
2. USSR (600)
4. Seeds - Disinfection
7. Electrothermal apparatus for disinfection of grain seeds from smut, Dokl. Ak. sel'khoz, 17, No. 10, 1952.

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

VOLKOV, S. T.

SHUPOVENKOV, P. G., and VOLKOV, S. T. "Electrothermal Equipment for Disinfecting Grain Seeds from Loose Soil," Doklady Akademií Sel'skokoziastvennykh Nauk Irani Y. I. Lenina, vol. 17, no. 10, 1952, pp. 17-21. 20A1

So: Sims 91-90-93, 15 Dec 1953



introduce into boiling soln. Sn Cl<sub>2</sub> crystals in small portions to a complete reduction of Fe<sup>+++</sup> and then 1-2g. excess (test with cadmate line by spot method). Boil the soln. for 5 min. and let stand overnight. Filter off the ppt. of Sn Te and wash it with H<sub>2</sub>O contg. HCl. Transfer the ppt with the filter into a flask, and 5 cc. of HCl contg. 3-4 drops of HNO<sub>3</sub> and digest at 80° to a complete soln. add 4-7 cc. H<sub>2</sub>O, filter into and evap. dish and 5cc. HCl and wash filter to a total vol. of 25 cc. to sep. Se and Te, introduce into the soln. 2cc. of 25% NH<sub>2</sub>OH.HCl and digest on a water bath at 90° for 2-3 hours. Decant the Te soln. from the Se ppt. with H<sub>2</sub>O. Dissolve Se in 6 cc. of coned. HCl contg. a few drops of HNO<sub>3</sub> as above, filter from the filter pulp, wash, dil. the filtrate to 23 cc., add 1cc. of 5% gum arabic (freshly prepd.) and 1cc. of 10% Sn Cl<sub>2</sub> and compare with standard soln. in the Duboscq. colorimeter. Unite the Te filtrate and wash water, evap. the soln. to dryness, dissolve the residue in a little water contg. 2-3 drops of HNO<sub>3</sub> and evap. to dryness. Dissolve the residue in 5cc. of coned. HCl, add a few cc. of H<sub>2</sub>O and proceed with the addition of Sn Cl<sub>2</sub>, gum arabic and colorimetric detn. as above. Pip the standard soln. by evap. 0.1g. Se and Te with coned. HNO<sub>3</sub> to dryness, dissolving the residue in 20 cc. of coned. HCl and dilg. to 100 cc. For detn. use a definite amt. of the standard soln. by adding 5cc. of coned. HCl, H<sub>2</sub>O to 23 cc. and 1cc. Sn Cl<sub>2</sub> and 1cc. gum arabic soln. as above.

Chas. Bianco.