

AID P - 4793

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 20/24

Author : Stepanov, L. P.

Title : Micrometric head of a gauge with mechanical fastening
of the ball.

Periodical : Stan. 1. instr., 3, 40, Mr 1956

Abstract : The author describes an inside caliper gauge provided
with a device for adjustment and replacement of the ball
on its edges. This attachment prolongs the useful life
of the instrument. One drawing.

Institution : None

Submitted : No date

PUGACHEV, I.I.; STEPANOV, L.P.

Hydrostatic bell. Trudy VNIIM no.22:113-116 '54. (MIRA 10:12)
(Manometer) (Hydrostatics--Measurement)

STEPANOV, L.P., red.; KUZNETSOVA, M.I., red izd-va; KONDRAT'YEVA, M.A.,
tekhn. red.

[Instructions 2-54 for checking standard spring manometers and
vacuummeters] Instruktsiia 2-54 po poverke obraztsovykh pru-
zhinnykh manometrov i vakuummetrov. Izd. ofitsial'noe. Mo-
skva, 1957. 14 p. (MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i ismeri-
tel'nykh priborov.
(Manometer--Testing) (Vacuum gauges--Testing)

DOLINSKIY, Ye.F.; AGALETSKIY, P.N.; GAYEVSKIY, N.A.; LASSAN, V.L.; OSTROUMOV, B.A.;
SMOLICH, S.A.; STEPANOV, L.P.; YANOVSKIY, B.M.

Metrological activities in the field of mechanical measurements.
Trudy.VNIIM no.33:39-59 '58. (MIRA 11:11)

1. Rukovoditel' otдела mekhanicheskikh izmereniy Vsesoyuznogo nauchno-
issledovatel'skogo instituta metrologii imeni D.I. Mendeleeva (for
Dolinskiy)

(Mensuration)

STEPANOV, L.P., inzh.

Investigating the performance of the SM-570 eccentric vibrating
screen. Stroitel. mashinostr. 3 no.12:15-19 D '58.
(MIRA 11:12)

(Vibrators) (Road machinery)

STEPANOV, L.P., inzh.

Grading sand on screening machines. Stroil. i dor. mashinostr.
4 no. 12:21-24 D '59. (MIRA 13:3)
(Sand and gravel plants)

MALYAROV, G.A.; STEPANOV, L.P.

Effect of air diluted in water on its viscosity. Trudy VNIIM
no.37:141-143 '59. (MIRA 13:4)
(Water) (Viscosity)

STEPANOV, L.P.

New graduation of hydrostatic steelyard-type balance (Westphal balance). Trudy VNIIM no.37:149-152 '59.

(MIRA 13:4)

(Balance)

STEPANOV, L.P.

Hydrostatic weighing of liquids in containers with shaped form.
Izm.tekh. no.9:12-13 S '60. (MIRA 13:9)
(Measuring instruments)

S/589/62/000/062/001/011
E194/E136

AUTHORS: Stepanov, L.P., and Stul'ginskaya, I.A.
TITLE: Viscosity measurements on petroleum products
SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh
priborov. Trudy institutov Komiteta. no. 62(122).
Moscow, 1962. Issledovaniya v oblasti izmereniy
vyazkosti, plotnosti i massy. 5-23.
TEXT: The Soviet standard ГОСТ 33-53 (GOST 33-53) which
specifies the measurement of kinematic viscosity of petroleum
products needs revision because the viscometers it considers are
unsuitable and the experimental conditions recommended do not
correspond to the established experimental errors. Study of this
question has shown that the Ubbelohde viscometer is the best
though it is unsuitable for opaque liquids and not very convenient
for low temperature determinations because of condensation.
For opaque liquids it is recommended to use the Cannon-Fenske
viscometer, slightly modified to ease filling. For measurements
at 0 °C the Volarovich four-bulb viscometer is recommended. For
measurements at lower temperatures it is recommended to use either
Card 1/3

Viscosity measurements on ...

S/589/62/000/062/001/011
E194/E136

the Pinkevich three-bulb type or the VNIIM viscometer which is the more accurate of the two though somewhat more complicated to manufacture. All the viscometers should be characterized by a series of nominal constants which are multiples of 1 and 3, i.e. 0.003; 0.01; 0.03; 0.1, etc. up to 30 cst/sec. There then follows a detailed analysis of the various sources of error in viscometry, namely, those associated with temperature and temperature measurement; expansion of the glass; time of holding viscometer at the given temperature; inaccurate filling; mounting off vertical; incomplete emptying [Abstractor's note: This factor is considered separately in the paper "Dependence of the precision of measurement on the amount of liquid remaining on the walls of viscometer reservoirs" by L.P. Stepanov, I.A. Stul'ginskaya and N.A. Chesnokov, pp 29-32 of same issue of these transcriptions]; surface tension; kinetic energy; variations in gravity; variations in atmospheric pressure; time errors; instrument constant errors; vibration. It is concluded that certain errors should be pointed out in the standard method. The results of the measurements should be corrected for kinetic energy, gravity variations and thermal

Card 2/3

Viscosity measurements on ...

S/589/62/000/062/001/011
E194/E136

expansion of the liquid (except in the case of suspended level viscometer).

There are 3 figures and 12 tables.

ASSOCIATION: VNIIM

SUBMITTED: March 25, 1961

Card 3/3

S/589/62/000/062/003/011
E194/E136

AUTHORS: Stepanov, L.P., Stul'ginskaya, I.A., and Chesnokov, N.A.

TITLE: Dependence of the precision of measurements on the amount of liquid remaining on the walls of viscometer reservoirs

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. no. 62(122). Moscow, 1962. Issledovaniya v oblasti izmereniy vyazkosti, plotnosti i massy. 29-32.

TEXT: The amount of liquid left behind in a viscometer reservoir is liable to be different from that which was left behind during the original calibration. The previous work on this subject, which has given rise to contradictory results, is reviewed. Tests were made with some hundreds of bulbs in five different sizes which, for the purpose of the experiments, were connected to capillaries by rubber tubing. The amount of liquid left adhering to the walls after tests, under various conditions corresponding closely to those of practical viscometry, was

Card 1/3

Dependence of the precision of ... S/589/62/000/062/003/011
E194/E136

determined by weighing. The relative amount of liquid remaining in spherical reservoirs was found to be independent of their volume, within the range 3.3-15 cm³ and the viscosity of petroleum products in the range 0.1-13 cst. The error that results from neglecting differences in the amount of liquid adhering to the reservoirs is not more than 0.05% for fluids having a viscosity of up to 1 cS, and is approximately 0.1% for fluids with viscosities in the range 1-13 cst. However, for pressure-viscometers the measurements on a given liquid under different rates of flow may differ by as much as 3%. The experimental data obtained are represented by the following approximate formula:

$$\frac{\Delta V}{V} = A + \frac{B}{\tau} \quad (4)$$

where: V - reservoir volume; τ - draining time, seconds; and A and B - constants having the following values for spherical reservoirs in the range 3.3-15 cm³ and flow times of 100-1000 secs.

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Dependence of the precision of ... S/589/62/000/062/003/011
E194/E136

Table 2

	Viscosity of petroleum product, cst		
	0.11	1.07	13.2
A	0.0008	0.0021	0.007
B	0.23	0.77	3.4

There are 1 figure and 2 tables.

ASSOCIATION: VNIIM

SUBMITTED: February 16, 1961

Card 3/3

MALYAROV, G.A. [deceased]; SOROKHINOVA, T.I.; STEPANOV, L.P.;
STUL'GINSKAYA, I.A.

Calibration liquids for the control test of viscosimeters.
Trudy inst. Kom. stand., ser 1 izm. prib. no.68:86-99 '63.
(MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. D.I. Mendeleyeva.

34143

S/169/62/000/001/053/083
D228/D302

3,5140 (1041)

AUTHORS: Leskova, Ye. A., Proshin, V. T. and Stepanov, L. S.

TITLE: Some characteristics of jet streams over the Pacific Ocean's north-western part

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 49, abstract 1B317 (Tr. Dal'nevost. n.-i. gidrometeorol. in-ta, no. 12, 1961, 45-51)

TEXT: The results are given for observations during the third voyage of the expedition ship "A. I. Voyeykov" from January 9 to February 22, 1960. The material relates to two periods. The first covers soundings from January 19 to February 9 during the ship's movement from north to south; their results are presented in a space-time section from 45°N, 160°E to 10°N, 150°E. The soundings from February 10 to 20 -- made during the ship's movement from south to north and presented in a section from 10°N, 150°E to 42°N, 133°E -- refer to the second period. In the first section a powerful subtropical jet stream with a wind speed of 150 m/sec is found

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D228/D302

Some characteristics of ...

at a height of 12 km in the zone 30 - 33°N. It corresponds to an intense tropospheric front in which the temperature contrast reaches 2.4°/100 km at a height of 6 km and 3.3°/100 km at an altitude of 8 km. Another jet-stream nucleus with a wind velocity of about 70 m/sec at the center is observed at 22 - 24°N at a height of 13 km. This is likewise a subtropical jet stream which has weakened and moved southwards. The preserved but latitudinally small tropospheric-front zone, in which the temperature contrast equals 3.1° per 100 km, also corresponds to it. At a height of 7 - 11 km between the extra- and subtropical jet streams the wind speed declines to 45 m/sec while keeping a westerly direction. The same decrease in the wind velocity, but with a change in the direction, is also observed to the south of the second subtropical jet. Starting from 20 - 24°N in the lower layers and from 19°N, too, at a height of 8 - 15 km south-westerly air streams change into southerlies and south-easterlies. In addition the velocity of the south-easterly flow grows with altitude, and a comparatively narrow zone of south-easterly winds with a speed of about 30 m/sec is found in

+

Card 2/4

34143

S/169/62/000/001/053/083

D228/D302

Some characteristics of ...

the 13 - 16 km layer in the area of 16 - 17°N. This is a south-easterly jet stream, formed on the south-western periphery of the Pacific Ocean anticyclone; depending on the measure of the vessel's southwards movement and on its withdrawal towards the southern periphery of the anticyclone, the jet stream gave place to a purely easterly flow with a wind velocity of 10 - 12 m/sec. The lower boundary of the jet stream is situated at an average height of 5 km. In the tropospheric-front region, however, especially on the first section, the descent of the lower boundary of the jet stream to a height of 2 - 3 km was observed. The growth of the wind speed to the heart of the jet is noted from the 5 km level. The unusual intensity of the subtropical jet stream is mentioned. This is explained by the development of a deep cyclone in the observational zone, with pressures of down to 946 mb at its center. Such an intense process over the ocean was also accompanied by the abrupt meridionality of the air streams above the land. This in its turn promoted the formation of an unusually intense high-altitude frontal zone and a powerful subtropical jet stream

Card 3/4

Some characteristics of ...

34113
S/169/62/000/001/053/083
D228/D302

which has not been considered above. 5 references. /-Abstractor's
note: Complete translation._7

Card 4/4

PATEL, Surendra J.; YASTREBOVA, I.P. [translator]; STEPANOV, L.V., redaktor;
IOVLEVA, N.A., tekhnicheskiiy redaktor.

[Agricultural laborers in modern India and Pakistan. Translated from
the English] Sel'skokhoziaistvennye rabochie v Indii i Pakistane.
Pereved s angliiskogo I.P. Iastrebovoi. Predislovie G.G. Kotovskogo.
Moskva, Izd-vo inostrannoi lit-ry, 1955. 197 p. (MLRA 9:5)
(India--Agricultural laborers) (Pakistan--Agricultural laborers)

STEPANOV, Lev Vasil'yevich

Aziya i Afrika, kontinenty v dvizhenii by L.V. Stepanov i G.I. Mirskiy.
Moskva, zd-vo Vostochnoy Lit'ry, 1963.

127 p. tables.

At head of title: Akademiya Nauk SSSR. Institut Mirovoy Ekonomiki i
Mezhdunarodnykh Otnosheniy.

Bibliographical footnotes.

1. Economic assistance - Asia. 2. Asia - Economic Assistance. 3. Economic
Assistance - Africa. 4. Africa - Economic assistance. 5. Underdeveloped areas.

STEPANOV, M.

Using reed as heat insulating material. Stroi. mat. 4 no.1:10
Ja '58. (MIRA 11:2)

(Insulation (Heat))
(Gorkiy--Reed (Botany))

STEPANOV M. (Moskva)

For a speedier solution of current problems. Sots. trud 8
no. 5:71-73 My '63. (MIRA 16:6)

(Machine-shop practice)

KOROBUT, L.A.; STEPANOV, M.A., inzh., retsenzent; FAL'KO, O.S.,
inzh., red.; UVAROVA, A.F., tekhn. red.

[Mechanization of agriculture in Great Britain] Mekhaniza-
tsiia sel'skogo khoziaistva Velikobritanii. Moskva, Mashgiz,
1961. 185 p. (MIRA 15:10)
(Great Britain—Farm mechanization)

AKHUNOVA, Turmanoy, Geroy Sotsialisticheskogo Truda; ZALASHANSKIY,
Stanislav Antonovich; MARTYNOV, Aleksey Nikiforovich;
STEPANOV, M.A., nauchn. red.; TOCHILINA, L.V., red.

[Technology of cotton growing and harvesting] Tekhnologiya
vozdelyvaniia i uborki khlopchatnika. Moskva, Vysshiaia
shkola, 1964. 117 p. (MIRA 17:9)

1. Kolkhoz imeni Kirova Yangiyul'skogo proizvodstvennogo
upravleniya (for Akhunova)

STEPANOV, M.A.; inzh.

Building one and two-story apartment houses using cementless
blocks. Nov.tekh. i pered.op. v stroi. 19 no.6:13-14 Je '57.

(MIRA 10:10)

(Apartment houses) (Building blocks)

5.2200,5.4120,21.3000

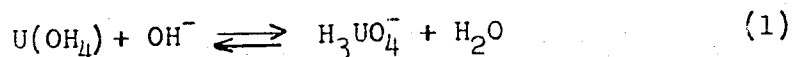
78330
SOV/89-8-3-15/32

AUTHORS: Galkin, N. P., Stepanov, M. A.

TITLE: Solubility of Uranium Hydroxide (IV) in Caustic Soda.
Letter to the Editor

PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 3, pp 258-261 (USSR)

ABSTRACT: Little is known about the precipitation of uranium (IV) hydroxide in a strongly alkaline medium. Only recently, Gayer and Leider (see ref) showed that the hydroxide of uranium (IV) is amphoteric. The equilibrium constant of the reaction:



is $1.7 \cdot 10^{-4}$. Since the solubility of the hydroxide was studied only up to a 0.6 N concentration of the alkali, the authors decided to check the applicability of the above relation for more concentrated alkaline solutions. Hydroxide of uranium (IV) was precipitated

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Solubility of Uranium Hydroxide (IV) in
Caustic Soda. Letter to the Editor

78330
SOV/89-8-3-15/32

from the hydrochloric acid solution by means of a water solution of caustic soda. The hydrochloric acid solution of uranium (IV) was prepared following prescriptions found in literature. The hydroxide of uranium (IV) was precipitated by adding 30 ml of a 0.34 N solution of caustic soda to 2 ml of the uranium chloride solution; the tightly closed test tube was kept for 6 hr in an air thermostat at 20° C, with continuous stirring of the contents. Decanting the precipitate three times in a pure argon atmosphere with water, the authors achieved considerable purity. A qualitative reaction on chlorine ion using silver nitrate gave a negative result. The authors note that the statement found in Gmelins (Handbuch der Anorganischen Chemie, Auflage 8, Hr. 55-Uran und Isotope, Berlin, 1936, S. 100), that potassium and sodium cannot be washed away from uranium (IV) hydroxide, seems to be wrong. Spectral analysis showed the absence of sodium (below 0.01%) when the precipitation was achieved using the caustic soda solution.

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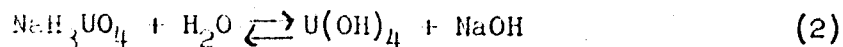
Solubility of Uranium Hydroxide (IV) in
Caustic Soda. Letter to the Editor

78330

SOV/89-8-3-15/32

This solution was prepared using chemically clean substances. Next, the authors added to the precipitate fixed quantities of alkaline and distilled water. Probes were then mixed in thermostats at $25 \pm 1^\circ\text{C}$ during 6 days (8 hr per day). The clear fraction was filtered through a paper filter, and the uranium content was then determined. Results are on Fig. A. The authors state that conclusions of Gayer and Leider are valid only up to a 0.5 N concentration. Above this concentration the linear relationship is destroyed, and Eq. (1) is not valid. The decrease in uranium concentration may be explained by salting out by means of sodium ions, if one assumes that a new compound NaH_3UO_4 is formed in the precipitate. Analyzing the solid phase, the authors came to the conclusion that the proposed compound can be stable only in strongly alkaline media, while in the presence of water an hydrolysis starts which can be described by the equation:

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Solubility of Uranium Hydroxide (IV) in
Caustic Soda. Letter to the Editor

78330
SOV/89-8-3-15/32

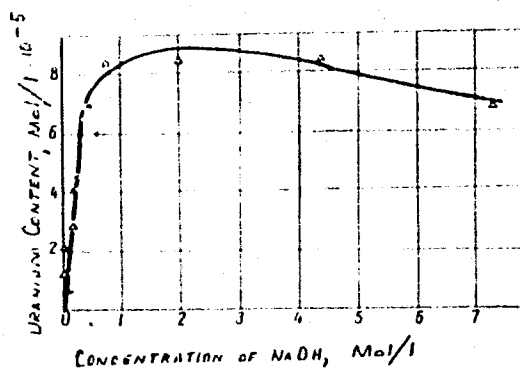


Fig. A. Concentration of uranium (IV) versus alkalinity of medium. (Δ) present data; (x) data by Gayer and Leider.

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Solubility of Uranium Hydroxide (IV) in
Caustic Soda. Letter to the Editor

78330
SOV/89-8-3-15/32

There are 1 figure; 2 tables and 9 references, 4 Soviet, 2 French, 1 German, 1 Canadian, 1 U.S. The Canadian and U.S. references are: K. Gayer, H. Leider, Canad. J. Chem. 35, Nr 1, 5 (1957); J. Katz, E. Rabinowitz, Chemistry of Uranium, M., Izd-vo inostr. lit., 1954.

SUBMITTED: November 27, 1959

Card 5/5

81223
S/089/60/009/004/003/020
B006/B070

21.3200

AUTHORS: Stepanov, M. A., Galkin, N. P.

TITLE: The Solubility Product of the Hydroxide of Tetravalent
Uranium ✓

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 4, pp. 282 - 285

TEXT: The present work gives a calculation of the solubility product of uranium (IV) hydroxide. An exact knowledge of the solubility product is necessary for a rational processing of uranium. In the introduction, the authors discuss results of some related papers (Refs. 1-8). Then, they discuss the determination of experimental data necessary for the calculation. The starting material was a solution in hydrochloric acid of uranium (IV) which was kept in a retort in a pure atmosphere of argon. Even after 15 days no oxidation of the uranium was observed. The concentration was measured titrimetrically with potassium bichromate. It was 0.590 M in relation to uranium and 1.02 M in relation to HCl. Solutions of ammonium hydroxide, sodium hydroxide, and potassium hydroxide (0.464, 1.992, 2.184 N, respectively) were used as precipitants. The pH

Card 1/2

STEPANOV, M.A.; GALKIN, N.P.

Solubility product of basic uranium (IV) sulfate. Zhur.neorg.-
khim. 7 no.5:983-986 My '62. (MIRA 15:7)
(Uranium sulfate) (Solubility)

KURDYMOV, A.V.; GOLOBORODOV, V.N.; STEPANOV, M.A.

Effect of magnesium and calcium on the corrosion resistance of nickel in an atmosphere of fluoride at 700-860°. Izv. vys. ucheb. zav.; tsvet. met. 6 no.4:138-144 '63. (MIRA 16:8)

1. Moskovskiy institut stali i splavov, kafedra tekhnologii liteynykh protsessov.

(Nickel--Corrosion)

(Metals at high temperatures)

ACCESSION NR: AP4029227

S/0131/64/000/004/0182/0185

AUTHOR: Guzman, I. Ya.; Komissarova, N. M.; Krutikova, I. M.; Stepanov, M. A.

TITLE: Sintering and some properties of CaF_2 ceramics

SOURCE: Ogneupory²⁹, no. 4, 1964, 182-185

ABSTRACT: Calcium fluoride has found wide use in various regions of technology as an active flux. Recently, calcium fluoride has begun to be used as a construction and shielding material for conducting a number of high-temperature chemico-metallurgical processes in fluorine-containing media. The authors bring to light processes of sintering as well as some properties of ceramics based on calcium fluoride. Characteristics of the initial materials are given in a table. Characteristics of ceramics from commercial calcium fluoride and the characteristics of ceramics from pure calcium fluoride are presented in tables which depict their properties at different temperature ranges. The composition in properties of grain structure samples of commercial calcium fluoride are given. Testing of calcium fluoride ceramics for corrosion resistance was conducted in a fluorine medium (concentration 92-97%) at a temperature of 750°C for 16 hours. The evaluation was conducted by visual and weight methods, as well as by stability change during the testing. The rate of corrosion of laboratory and industrial samples was from 5.5 to $19 \text{ g/m}^2/\text{hr}$;

Card 1/2

ACCESSION NR: AP4029227

during testing the stability increased. The obtained results attest to the fact that in a fluorine medium, at 750°C, calcium fluoride ceramics are completely stable and maintain their stability. Therefore, parts can be recommended for service under such conditions as refractory lining material, filters, etc. Orig. art. has: 4 tables.

ASSOCIATION: Khimiko-tekhnologicheskii institut im. D. I. Mendeleeva (Chemico-technological Institute)

SUBMITTED: 00

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 005

Card 2/2

12 February 1977

12 February 1977

Andreiya nauk Druvinye'koyi RSR. Institut matematiki

Zastoyavaya metoda elektrodinamicheskoy analogii do razresheniya
voprosov teorii tekuchey sredy (Application of the Method of Electro-
dynamic Analogy to the Solution of Various Engineering Problems) 1974,
Vyd-vo AN URSR, 1975. 160 p. 1,000 copies printed.

M. of Publishing House: T.K. Krasnitskiy, Tech. Ed.; O.O. Matryshchuk;
Editorial Board: P.P. Filchenko (Resp. Ed.), Y.M. Ostapenko (Resp.
Secretary), Yu.V. Shalovachukha (Resp. Ed.), I.B. Potryayev, and
V.B. Shumakov.

REMARKS: This book is intended for scientific workers, engineers,
aspirants and students.

CONTENTS: This book is a collection of articles on the application of the
electrodinamic analogy method to the solution of various engineering
problems. Among the topics discussed is the modelling of certain technical
problems on resistance paper by the electrodynamic analogy method. Special
attention is given to the study of various problems of filtration, in both
homogeneous and nonhomogeneous ground, problems of plane bending, the com-
plexing problems, modelling electro-osmotic water level fall, the com-
pensation of errors in the application of the electrodynamic analogy method
to the design of the underground contour of low-pressure block-
type dams and the accuracy of the electrodynamic analogy method
are studied and the new, more universal model of the RDA integrator is de-
scribed. All the articles and with summaries in Russian and English.

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PA 30T41

USSR/Medicine - Oxygen
Medicine - Gases

Apr 1947

"Use of Oxygen for Treatment of Wounds, and Use of
Compressed Oxygen for Treating Spontaneous Gases,"
M. G. Stepanov, 4 pp

"Gospital'noye Delo" No 4

The first case was treated in this manner at the Pa-
thological Laboratory of the Black Sea Fleet in 1943.
Two methods were used in treatment of wounds, admit-
ting oxygen into the respiratory passages, and piping
oxygen into the stomach regions. Further experiments
were made with the oxygen applied directly to the
wound. This method of treatment of wounds by means

LC

30T41

USSR/Medicine - Oxygen (Cont'd)

Apr 1947

of oxygen gas has proven its worth and is basically
good. From the Chair of Pharmacology, Stalino Medi-
cal Institute.

LC

30T41

-TITANOV, M. G.

STEPANOV, N. G.

"Glucose as a Tonicizing Factor for the Cardiovascular System." Sub 22
Mar 51, Acad Med Sci USSR.

Dissertations presented for science and engineering degrees in Moscow
during 1951.

SC: Sum. No. 480, 9 May 55.

CHANCY, M. V.; KULCHENKO, A. I.; STEPANOV, M. G.

"Several Methods of Processing Electron (Magnesium) Alloys in the Liquid State,"
"Trudy Moskovskogo Aviatsionnogo Tekhnologicheskogo Instituta" (Proceedings
of the Moscow Aviation Inst. of Technol.), Issue No. 4, pp 3-29, 1948.

ACC NR: AP6027800 SOURCE CODE: UR/0126/66/022/001/0157/0158

AUTHOR: Konstantinov, B. P.; Zimkin, I. N.; Stepanov, M. I.; Shestopalov, L. M. 4/8

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR (Fiziko-
tekhnicheskiy institut AN SSSR)

TITLE: Hardening of steel surface by wire explosion

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 1, 1966, 157-158

TOPIC TAGS: metal ~~steel~~ hardening, ~~steel~~ surface hardening, wire, ~~explosive~~ steel

ABSTRACT: Copper or steel wire, 0.38—0.4 mm in diameter and 40—50 mm long, placed 10 mm above the face of a cylindrical U8A steel specimen was exploded by a current pulse produced by the discharge of a capacitor. As a result of this explosion, the surface microhardness increased from the original 170—200 kg/mm² to 950—1200 kg/mm². Although the average thickness of the hardened layer was 20—30 μ , it was uniform and varied from 0 to 60 μ . X-ray diffraction patterns showed that the surface layer contained up to 70% austenite, the rest being mostly ferrite with no significant quantity of martensite. It could be that the metal surface was decarbonized, or the ferrite had no time to

Card 1/2 UDC: 621.785.5

ACC NR: AP6027800

change to austenite, or the high rate of cooling preserved δ ferrite.
The block size in the hardened layer was about 450 Å. (ND)

SUB CODE: 11, 13/ SUBM DATE: 23 Sep65/ OTH REF: 001/ ATD PRESS: 5062

Card 2/2 *100LP*

OSIPYAN, V.T.; STEPANOV, M.K.; GRABOVSKIY, B.S.; SMIRNOV, K.K.; KAZHDAN, V.B.; MASLIY, L.K.; DUNAYEVA, I.D.

Comparative effectiveness of hexamethylenebenzamide and acetyl-tetrahydroquinoline as protective agents against fleas in humans.
Med. paraz. i paraz. bol. 32 no.5:551-553 S-O'63 (MIRA 16:12)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

STEFANOV, M. L., Cand Tech Sci -- (diss) "Research into methods of accomplishing the work of vertical slip-lifts at several levels simultaneously." Moscow, 1960. 16 pp; (Academy of Sciences USSR, Inst of Mining Affairs); 150 copies; price not given; (KL, 18-60, 153

STEPANOV, M.L., kand.tekhn.nauk

Tabulating cable functions $M_n(\tau)$. Mekh. i avtom. v gor. prom.
no.3:155-162 '63. (MIRA 16:10)

POKSHISHEVSKIY, V.V., doktor geogr. nauk, prof.; VARLAMOV, V.S.; KHORLEV.
B.S.; STEPANOV, M.N.; BOTVINNIKOV, V.I.; KOLOBKOV, M.N.;
VOROB'YEV, V.V., kand. geogr. nauk; KLIMOV, A.I.; STEPANOV,
A.A.; MYAKUSHKOV, V.A., red.; BELICHENKO, R.K., mladshiy red.;
MAL'CHEVSKIY, G.N., G.N., red.kart; VILENSKAYA, E.N., tekhn. red.

[Moscow - Vladivostok; railroad guide] Moskva - Vladivostok; pu-
tevoditel' po zheleznoi doroge. Moskva, Geografiz, 1962. 266 p.
(MIRA 15:11)

(Railroads--Guides)

STEPANOV, M.N.

Linear regression analysis of the results of fatigue testing
of aluminum alloys. Zav. lab. 29 no.10:1212-1214 '63.
(MIRA 16:12)

1. Moskovskiy aviatsionnyy tekhnologicheskoy institut.

L 35416-65 EWT(1)/EWT(φ)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(b) Ps-4 IJP(c) MJW/
 ACCESSION NR: AP5007678 EM/JD S/0032/65/031/003/0349/0354

AUTHOR: Stepnov, M. N.

TITLE: Distribution of durability under fatigue tests of light construction alloys

SOURCE: Zavodskaya laboratoriya, v. 31, no. 3, 1965, 349-354

TOPIC TAGS: metal fatigue, metal bending, aluminum alloy, probability, statistics/
 AV aluminum alloy, V 95 aluminum alloy

ABSTRACT: A probabilistic approach to establishing the durability and reliability of metal alloys is investigated. Two probability functions have found wide use in fatigue testing. These are: 1) the Weibull function $P(\bar{N}) = 1 - \exp \left[- \left(\frac{N - N_0}{N_0} \right)^m \right]$.

established by W. Weibull (Trans. of Royal Institute of Technology, Stockholm, No. 27, 1949, and Saab Aircraft Company, Technical Note, 30, 1954); and 2) the normal

distribution $P(x) = \frac{1}{\sqrt{2\pi}\sigma} \int_{-\infty}^x e^{-\frac{(x-\bar{x})^2}{2\sigma^2}} dx$. In the former distribution, N is the number of cycles until specimen destruction, N_0 , N_v , and m are distribution parameters. In

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L 35416-65
ACCESSION NR: AP5007678

the latter distribution $x = \log N$, and \bar{x} , σ^2 are the mean and variance respectively. Both distributions are used in analyzing fatigue test data from experiments with several specimens of aluminum alloys V95 and AV. Specimens were made in the form of bars 6.75 (V95) and 8 mm (AV) in diameter and tested at a rate of 6000 cycles/minute. The results of the tests are shown in Figs. 1, 2, 3, and 4 on the Enclosure. Based on these observations, the author recommends the use of the normal (Gaussian) distribution. The Weibull distribution was not found to be in close agreement with experimental data. Orig. art. has: 3 equations and 5 figures.

ASSOCIATION: Moskovskiy aviatsonno-tekhnologicheskii institut (Moscow Aviation Technological Institute)

SUBMITTED: 00

ENCL: 03

SUB CODE: MM

NO REF SOV: 006

OTHER: 006

Card 2/5

L 35416-65

ACCESSION NR: AP5007678

ENCLOSURE: 01

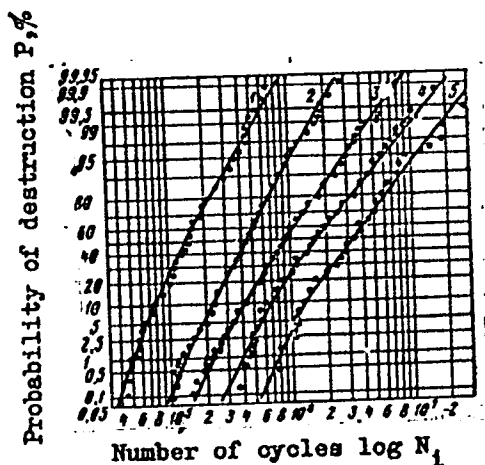


Fig. 1. Curves of the durability distribution in coordinates $P - \log N$ (normal distribution)

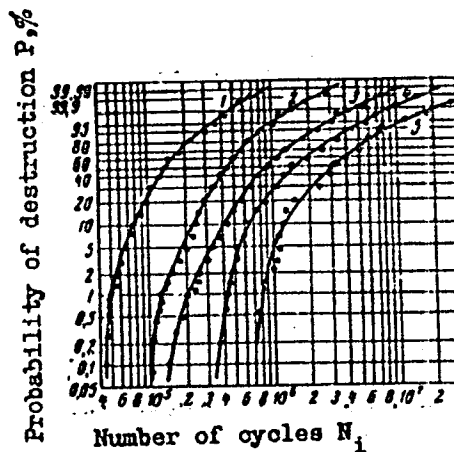


Fig. 2. Curves of the durability distribution in the coordinates $P - \log N$ (Weibull distribution)

Cord 3/5

L 35416-65

ACCESSION NR: AP5007678

ENCLOSURE: 02

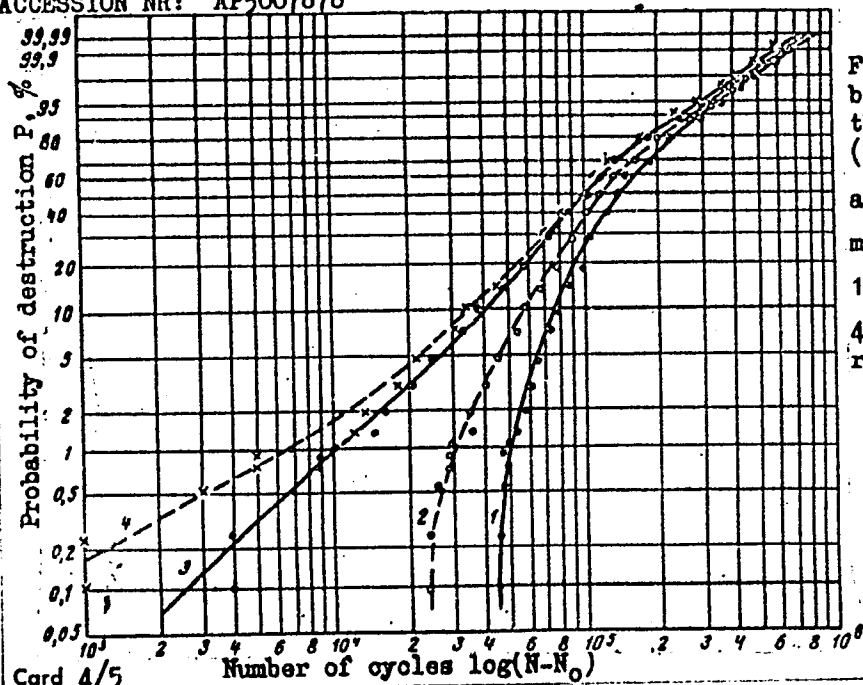
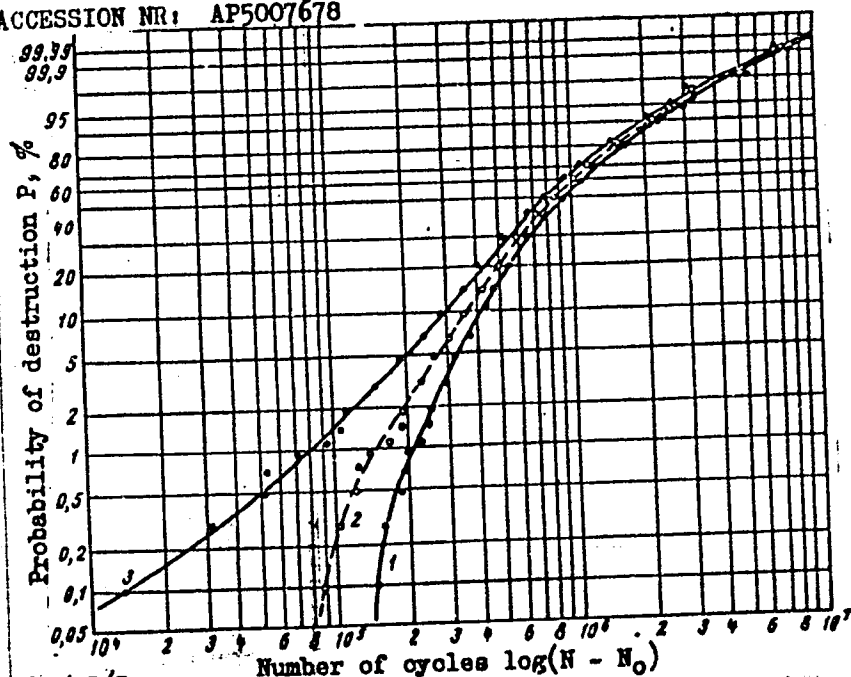


Fig. 3. Curves of durability distribution in the coordinates P - $\log(N - N_0)$ for specimens of alloy V95, $\sigma_{\max} = 30 \text{ kgs/mm}^2$, $n = 463$
 1 - 4 - $N_0 = 0$; $2 \cdot 10^4$; $4 \cdot 10^4$; and $4.3 \cdot 10^4$ respectively

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ACCESSION NR: AP5007678

ENCLOSURE: 03



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Fig. 4. Curves of the durability distribution in the coordinates $P - \log(N - N_0)$ for specimens of alloy AV, $\sigma_{\max} = 18 \text{ kgs/mm}^2$, $n = 500$
 1 - 3 - $N_0 = 0$; $6.5 \cdot 10^4$; and $1.4 \cdot 10^5$ respectively

L 45379-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(z)/EWP(b) Ps-4 IJP(c)
 MJW/JD

ACCESSION NR: AP5006999

S/0129/65/000/003/0005/0008

AUTHOR: Klygin, L. P.; Stepnov, M. N.; Zakharov, V. Z.

TITLE: Fatigue and static crack strength of articles pressed from AV alloy of various degrees of purity 32
31
B

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 3, 1965, 5-8, and bottom half of insert facing p. 24

TOPIC TAGS: anisotropy, metal physical property, metal mechanical property, defect formation, oxide blister

ABSTRACT: The effect of metallurgical defects of the "oxide blister" type on the static crack strength, ductility, and fatigue strength of pressed semifinished products made of AV alloy was investigated. In order to determine the effect of the oxide blisters on the anisotropy of the properties, specimens with a working diameter of 3 mm were cut off in the extrusion direction, and also along the width and height of the strip. Data were also obtained on the effect of oxide blisters using a scale factor, for which specimens with a diameter of 10 mm were tested, and average values of the strength, reduction of area, and elongation were obtained and

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L 45379-65

ACCESSION NR: AP5006999

tabulated. The results show that oxide blisters markedly decrease the fatigue resistance of the material, particularly in transverse specimens. It was found that in all cases, the origin of a fatigue crack was an oxide inclusion. It is concluded that the presence of oxide blisters decreases the plasticity and resistance to cyclic loads, and markedly increases the scatter of the fatigue properties of pressed semifinished products. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Aluminum alloy

27

b/p
Card 2/2

ex

7

Determination of manganese in accumulator acid. M. N. Stepanov and S. N. Remnev. *J. Chem. Ind. (U. S. S. R.)* 19, No. 8, 223 (1959). - The acid sample is evaporated and the ignited residue dissolved in boiling dil. H_2SO_4 . The filtrate from this is oxidized with $(NH_4)_2S_2O_8$ in the presence of Ag^+ and the MnO_4^- ion is detd. colorimetrically by comparison with a standard $KMnO_4$ soln. H. M. L.

ALU 51.4 METALLURGICAL LITERATURE CLASSIFICATION

CA

7

PROCEDURES AND PROPERTIES INDEX

Determination of selenium in sulfur. M. N. Remnev and S. N. Remnev. *Zhurnal Khim. O.* 119 50(1940).
 Mix 25 g. of S in a cylinder with 50 ml. of a soln. contg. 100 g. $MgCl_2 \cdot 6H_2O$ in 50 ml. water, place the cylinder in a $CaCl_2$ bath, heat to $120-125^\circ$ and start stirring to emulsify the S. Immediately start adding cooled HNO_3 in small amts. until 20 ml. was added in 10-20 min. At the end of this time the $MgCl_2$ soln. should have sufficient HNO_3 to prevent the reduction of the Se. Cool the mixt., filter through a quartz filter and wash with hot water. Det. the Se by the method of Marvin and Schumb (*C.* 40, 479). If Fe is present evap. the filtrate to 10 ml. and neutralize with NH_3 . Filter, add 10 ml. HNO_3 and 5 g. urea, heat to 80° , cool, dil. to 100 ml., add 3 g. KI and starch and titrate with thiosulfate. If the S contains more As than Se the latter is first sepd. as elementary Se and then detd. by titration. H. Z. Korsch.

ALSO SEE METALLURGICAL LITERATURE CLASSIFICATION

CV

7

Determination of arsenic in sulfur. M. N. Stepanov and S. N. Remnev. *Zashchita Lit.* 9, 415-10(1940).-- The As is extd. from the S by emulsifying the molten S in a soln. of $MgCl_2$ and treating with HNO_3 (C. A. 34, 5781) after which the As is detd. gravimetrically as $Mg_3As_2O_8$. The presence of Se does not interfere with the detn. of As and both elements may be detd. in the same sample.
B. Z. Kamich

AS 51.4 METALLURGICAL LITERATURE CLASSIFICATION

1940-1949

1950-1959

1960-1969

1970-1979

1980-1989

1990-1999

2000-2009

2010-2019

2020-2029

2030-2039

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2050-2059

2060-2069

2070-2079

2080-2089

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2100-2109

2110-2119

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<p>1ST AND 2ND ORDERS</p>																										<p>140 AND 4TH ORDERS</p>																									
<p>PROCESSES AND PROPERTIES INDEX</p>																																																			
<p>Refining sulfur which contains bitumen. M. N. Macdonov. <i>J. Chem. Ind. (U. S. S. R.)</i> 17, No. 1, 43-4 (1940). Sulfur heated for a short time at temps. above 250° in a sealed container. This destroys most of the bitumen, and the S is finally purified by distn. H. M. Leicester</p>																																																			
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Maturation of H_2SO_4 from acid sludge from refining cracked products. M. N. Stepanov and N. N. Remnev. *J. Chem. Ind. (U. S. S. R.)* 1954, 6, 8 (1941); *Chem. Zvesti.* 1953, 1, 364-5. --If the residue is treated at normal pressure with direct steam, adding hot water, the yield of H_2SO_4 is 60-65%. The content of the acid is 2-3% when steam is used and 37-47.9% when hot water is used. With increasing atm. pressure, the amt. of org. material in the acid decreases. Comp. the acid under normal pressure causes great loss of acid by reduction; with vacuum, the losses are small but at an acid concn. of 80% the acid and the accompanying org. matter form a gel. Upon diln with water the org. matter can be removed by filtration and the acid can be subsequently concd. A. K. Esterov. **Pumping light hydrocarbons.** Newben G. Lovell. *Petroleum Refiner* 23, 117-22 (1944). --Various types of pumps used in handling C₄ and lighter fractions are discussed. H. H. Renwick.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

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Purifying S for gases from So. M. N. Stepanov, S. N. Remnev and I. I. Berger. *J. Chem. Ind. (U. S. S. R.)*, No. 20, 4-7(1941).—The S, which contains Se and As, is emulsified by stirring in a soln. of 100 g. $MgCl_2 \cdot 6H_2O$ per 30 cc. H_2O at 125° . The emulsion is treated with 100 kg. HNO_3 per ton S. Arsenic is quickly and completely oxidized and 84.6% of the Se is removed by a 1st-order, heterogeneous oxidation. About 2% of the S is also oxidized.
H. M. Leicester

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

AMELIN, A.G.; BALEYEV, A.V.[deceased]; BRUTSKUS, Ye.B.; IEL'MAN, F.N.;
OSHEROVICH, R.Ye.; STEPANOV, M.M.; CHEPBLEVETSKIY, M.L.; CHERNO-
BAYEVA, M.M.; MIKHAL'CHUK, B.V., redakter; LEONT'YEVA, K.D., re-
dakter; SHPAK, Ye.G., tekhnicheskii redakter.

[Methods of analyzing and controlling the production of sulfuric
acid and superphosphates] Metody analiza i kontrolya proizvodstva
sernei kisloty i superfosfata. Sost. A.G.Amelin i dr. Pod red.
B.V.Mikhal'chuka. Moskva, Gos.nauchno-tekhn. izd-vo khim. lit-ry,
1955. 159 p. (MLRA 9:5)

1.Moscow. Nauchnyy institut po udebreniyam i insektofungitsidam.
(Sulphurec acid) (Phosphates)

KUDRYAVTSEV, Aleksandr Andreyevich; STEPANOV, M.N., starshiy nauchnyy sotr.,
kand. tekhn. nauk, retsenzent; SHIDLOVSKIY, A.A., doktor tekhn.
nauk, prof., retsenzent; TANANAYEV, I.V., akademik, prof., doktor
khim. nauk, red.; PLETNEVA, N.B., red.; ALAVERDOV, Ya.G., red. izd-
va; VORONINA, R.K., tekhn. red.

[Chemistry and technology of selenium and tellurium] Khimiya i
tekhnologiya selena i tellura. Pod red. I.V.Tananaeva. Moskva,
Gos. izd-vo "Vysshaia shkola," 1961. 284 p. (MIRA 14:10)

1. Deystvitel'nyy chlen AN SSSR (for Tananayev).
(Selenium) (Tellurium)

7000000, 7.1.1; SHCHERBAKOV, N. S.

Moscow - Building

New appearance of Moscow. Geog. v shkole no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952, Uncl.

VOROB'YEV, V. V., STEPANOV, M. N.

STEPANOV, M. N.
Russia - Economic Conditions - Maps

Map of the industrialization of the U.S.S.R., Geog. v shkole no. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

STEPANOV, M.

KIBAL'CHICH, O.; STEPANOV, M.

Discussion of the scientific tasks of the division of economic regionalisa-
tion. Vest.Mosk.un.8 no.9:164-169 S '53. (MIRA 6:11)

(Geography, Economic)

STEPANOV, Mikhail Nikolayevich; POKSHISHEVSKIY, V.V., doktor geograficheskikh nauk, otvetstvennyy redaktor; DOBRONRAVOVA, K.O., redaktor; PETUKHOV, V.G., khudozhestvennyy redaktor; KOSHELEVA, S.M., tekhnicheskii redaktor; GOLITSYN, A.V., redaktor kart.

Molotov. Moskva, Gos. izd-vo geogr. lit-ry. 1954. 71 p. (MLBA 8:2)
[Microfilm]
(Molotov--Description)

STEPANOV, M.N.

VOROB'YEV, V.V.; STEPANOV, M.N.

Books about the Altai Territory. Reviewed by V.V.Vorob'ev,
M.N.Stepanov. Geog.v shkole no.2:76-78 Mr-Apr '54. (MIRA 7:2)
(Altai Territory--Description and travel)

KIBAL'CHICH, O.A.; STEPANOV, M.N.

Present problems of the division of the U.S.S.R. into economic districts. Izv.Vses.geog.ob-va no.4:354-360 J1-Ag'55.
(Geography, Economic) (MIRA 8:10)

VOROB'YEV, V.; KIBAL'CHICH, O.; STEPANOV, M.

Discussion of problems of the distribution of productive forces
and the division of the U.S.S.R. into economic districts in the
Moscow Branch of the Geographic Society of the U.S.S.R. Izv.AN
SSSR, Ser.geog. no.2:163-165 Nr-Ap '56. (MLRA 9:8)
(Geography, Economic)

STEPANOV, M.N.; VOROB'YEV, V.V.

Local publications devoted to individual towns. Reviewed by
M.N. Stepanov, V.V. Vorob'ev. Vop.geog. no.38:266-270 '56.
(MIRA 9:9)

(Cities and towns --Book reviews)

STEPANOV, M.N.

Special features of the districts adjacent to the city of Perm.
Ůch. zap. Perm. gos. un. 15 no.2:43-46 '60. (MIRA 14:12)
(Perm region--Agriculture)

STEPANOV, M.N.

"Man improves the planet" by I.I. Adabashev. Reviewed by M.N. Stepanov. Geog. v shkole 23 no. 6:89-90 M-D '60.

(MIRA 13:11)

(Geography)

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STEPANOV, M.N.

"Formation of an urban network in the southern part of Eastern
Siberia" and "Changes in the urban geography of the southern
part of Eastern Siberia" by V.V. Vorobev. Reviewed by M.N.
Stepanov. Izv. Vses. geog. ob-va 92 no. 5: 470-472 8-0 '60.
(MIRA 13:9)

(Siberia, Eastern--Cities and towns)
(Vorobev, V.V.)

GOLOVAKO, Viktor Kazimirovich, inzh.-gidrograf; ARKHIFOVA, R.I.,
kand. geogr. nauk, retsenzent; STEFANOV, M.N., kand.
geogr. nauk; KOLOSHITSYN, V., red.

[Lakes of our territory] Oзера nashego kraia. Sverdlovsk,
Sverdlovskoe knizhnoe izd-vo, 1963. 134 p.
(MIRA 17:7)

STEPANOV, M.N.

Main features of the West Ural Economic Region. Uzh. zap. Perm.
gos. un. 101:5-19 '63 (MIRA 18:2)

STEPIVILY, M. P.

3-5-28/38

AUTHORS: Grebennikov, S.F. Candidate of Technical Science and Stepanov, M.P.

TITLE: To Introduce New Methods in Laboratory Practice (Novoye - v laboratornyy praktikum)

PERIODICAL: Vestnik vysshey shkoly, 1957, Nr 5, pp 71 - 73 (USSR)

ABSTRACT: New laboratory work methods of measuring electrically non-electric values were elaborated at the chair of Principles of Electric Engineering of the Moscow Institute of Mechanization and Electrification in Agriculture. The aim of this work is to acquaint the students with the utilization of the wire transducers for the investigation of bending and torsion.

The investigation of bending is described first. A wire transducer having a resistance of 100 ohm is glued to a console beam as shown in Figure 1. The investigation is made by means of an electric bridge circuit mounted on a wooden panel and consisting of 100-ohm resistors. A variable 2-ohm wire resistor is located in series with a fixed resistor on one of the bridge arms. A mirror galvanometer is used for obtaining the zero reading. Current is supplied by a battery. The sensitivity of the bridge circuit may be altered by changing the battery voltage. By changing the resistance, the sensitivity of the galvanometer can be altered.

Card 1/3

3-5-28/38

To Introduce New Methods in Laboratory Practice

On the basis of experience and results computed, the students compose a functional dependence graph of the bending moment, in accordance with the indication of the galvanometer, and then determine the bending moment by the activity of the arbitrary force at the end of the console beam. By using the values of transducer calibration it is possible to determine the value of the bending moment; and, knowing this, to determine the arbitrary force.

The authors then describe the investigation of torsion. For this purpose a hollow shaft (tube), on a section of which a 100-ohm wire transducer is glued in a helical line, is used. The transducer is connected to the afore-mentioned bridge in place of the transducer used for investigating bending. The students' task is to observe the changing indications of the galvanometer by changing the torque through the alteration of forces at the end of the arm, and to register the results in a table.

On the basis of experience and calculated results, the students compose a graph of functional dependence $\alpha = f(M_{kp})$. Having obtained the values of the transducer calibration, the students are now able to determine the torques, consider-

Card 2/3

To Introduce New Methods in Laboratory Practice

3-5-28/38

ing the action of arbitrary forces.

The authors believe that the carrying out of the above mentioned task will direct the attention of the future specialists on new methods for the investigation of details in machine units and operating mechanisms. The article contains 2 photographs, 1 circuit diagram and 4 tables.

ASSOCIATION: Moscow Institute of Mechanization and Electrification of Agriculture imeni V.M. Molotov (Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva imeni V.M. Molotova)

AVAILABLE: Library of Congress

Card 3/3

572 44404, 111
STEPANOV, M.P.

Case of myelosis with a blood picture characteristic of pernicious anemia. Vrach.delo no.10:1089 O '57. (MIRA 10:11)

1. Terapevticheskoye otdeleniye i klinicheskaya laboratoriya
bol'nitsy st. Novo-Cherkassk Severo-Kavkazskoy zheleznoy dorogi.
(MARROW--TUMORS) (ANEMIA)

STEPANOV, M.Ye., kapitan 1-go ranga, dotsent, kand. voyenno-morskikh nauk

Effect of the development of military technology on methods of
solving battle problems at sea. Mor. sbor. 47 no. 3:11-27 Ag 1964.
(MIRA 18:7)

STEPANOV, N.

Enlarging of panoramic negatives. Sov. foto 22 no.12:31 D '62.
(MIRA 16:1)

(Photography—Enlarging)

STEPANOV, N.

AID - P-138

Subject : USSR/Aeronautics
Card : 1/1
Author : Stepanov, N.
Title : The Sacred Oath of a Soviet Soldier
Periodical : Kryn. Rod., 1, 6 - 7, Ja 54
Abstract : This is patriotic propaganda. The military oath is the principal topic to encourage a soldier after discharge from the armed forces to join the DOSAAF organization.
Photo.
Institution : None
Submitted : No date

AID P - 2665

Subject : USSR/Aerodynamics

Card 1/1 Pub. ~~50~~ - 3/20

Author : Stepanov, N., Col.

Title : ~~USSR/Aerodynamics~~
The banner of the unit

Periodical : Kryl. rod., 7, 2-3, J1 1955

Abstract : A glorification of the banner of the unit as an emblem of patriotism and devotion to duty. Examples of heroism in World War II are given. Photo of Borshchev, P. S.

Institution : None

Submitted : No date

STEPANOV, N., letchik-ispytatel'.

Expert repair and flight test of an Il-14 airplane. Grashd. av.
13 no.9:22 S '56. (MLRA 9:11)
(Airplanes--Maintenance and repair)

STEPANOV, N., polkovnik; GOLYSHEV, M., polkovnik.

The Soviet pilot. Kryl. red. 8 no.5:4-5 My '57.
(Russia--Air pilots)

(MIRA 10:6)

STEPANOV, N., polkovnik

His calling. Kryl.rod. 11 no.7:19-20 Л '60.
(Golubev, Viktor Maksimovich)

(MIRA 13:7)

STEPANOV, N.

Cut down on idle time during the maintenance of aircraft. Grazhd.
av. 17 no.5:26-27 My '60. (MIRA 13:7)

1. Nachal'nik tsokha lineyno-ekspluatatsionnykh i remontnykh
masterskikh, Vnukovo.
(Moscow--Airplanes--Maintenance and repair)

STEPANOV, N.; OSIPENKOV, G., starshiy inzhener

In the flow of work. Grashd.av. 17 no.10:6-7 O '60. (MIRA 13:9)

1. Nachal'nik lineyno-ekspluatatsionnoy i remontnoy masterskoy, g. Vnukovo (for Stepanov).
 2. Tekhnologo-konstruktorskoye byuro lineyno-ekspluatatsionnoy i remontnoy masterskoy, g. Vnukovo (for Osipenkov).
- (Airplanes--Maintenance and repair)

STEPANOV, N.

In the sky above two seas. Kryl. rod. 12 no.3:8-9 Mr '61.
(MIRA 14:6)
(Chelnokov, Nikolai Vasil'evich)

STAN. 11.

On technical possibilities of VRM-5 buttons. Mor. list 25 no.8:
1963 Ag '65. (MIRA 18:8)

• Ka izan parashoda "Kalu" Dal'novostochnogo puchknotstva.

DERIBAS, A.T., inzh.; SMIRNOV, Ye.K., kand.tekhn.nauk; STEPANOV, N.A.,
inzh.

Necessity for a simplification of freight forms and the clearing
systems for transportation charges. Zhel.dor.transp. 42
no.5:35-38 My '60. (MIRA 13:9)

(Railroads--Freight)

(Railroads--Accounts, bookkeeping, etc.)

YEROFEYEV, Ye.V.; KOGAN, A.N.; STEPANOV, N.A.; TIKHONCHUK, Yu.N.;
UGODIN, Ye.G.

Improving the organization of mineral fertilizer transportation
by collective and state farms. Zhel.dor.transp. 44 no.7:18-21
Jl '62. (MIRA 15:8)
(Fertilizers and manures--Transportation)

ZHIVOV, K.I.; STEPANOV, N.A.

The UA-300 automatic weft-rewinding machine. Biul. tekhn.-ekon.
inform. no.3:50-52 '58. (MIRA 11:6)

(Textile machinery)

U.S. POW, N. V. : N. V. : 1.7.

U.S. POW, N. V. : N. V. : 1.7. Bml. takh. - plar. 107/100.
N. V. : 1.7. (IRA 14:7)

(Postile machinery)

~~STEPANOV~~ *N.D.*
BRYUKHIN, A. N.; STEPANOV, N. D.

Weaving

More about the constant speed of warping.
Tekst. prom. 12, No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

STEPANOV, N.D.; SOLOMINA, M.Ya.

Organisation of agricultural meteorological observations of
winter crops. Meteor. i gidrol. no.2:33-34 P '52.

(MLBA 8:9)

1. Sverdlovskoye UOMS, Sverdlovsk.

(Meteorology, Agricultural--Observations)

50-58-4-15/26

AUTHOR: Stepanov, N. D.

TITLE: On the Agro-Meteorological Service for Kolkhoz, Sovkhoz and MTS (~~Machine~~ and tractor stations - ~~mashinno-traktornyye~~ stantsii) Ob agrometeorologicheskoy obsluzhivaniy kolkhozov, sovkhozov i MTS)

PERIODICAL: Meteorologiya i Gidrologiya, 1958, Nr 4, pp 40 - 40 (USSR)

ABSTRACT: This kind of direct service for agricultural industries is no less important than the one of the district organizations. In practice, however, above all the latter are supplied. To the local organizations the hydro-meteorological bureaus (Gidro-meteoburo) send only weather forecasts and warnings. The hydro-meteorological stations (Gidrometeorostantsiya), which have to care for the local agricultural organizations, mainly just pass on the same data to the factories. The factories, however, need respective informations in the larger sense of the word to a not less degree. But they ought to be arranged differently, more concretely, and be adapted to the factory conditions. Therefore the informations ought to come from a hydrometeorological station, which is to have the sup-

Card 1/2

50-58-4-15/26

On the Agro-Meteorological Service for Kolkhoz, Sovkhoz and MTS (Machine and tractor stations - mashinno-traktornyye stantsii)

port of the weather- and of the hydrometeorological office. For this purpose UGMS (Hydrometeorological Service Administration) in Ural'sk wrote an information letter for the stations, which is to serve the above mentioned purpose. In this the estimation methods of the agro-meteorological conditions and methods for drawing up informations are explained in an intelligible form. These methods were worked out by the Central Weather Forecast Institute (TsIP). They must be present in handy form. Therefore UGMS recommended to the stations a drawing up of agro-climatical parameters and specimens to tables.

AVAILABLE: Library of Congress

1. Agriculture - USSR
2. Meteorology - Applications

Card 2/2