The plate occupies the domain S bounded by the curve L consisting of

$$L_j=[l_j,\ l_{j+1}]\quad (j=1,\ 2,\ \ldots,\ m,)$$
$$l_{m+1}=l_1.$$

The potential energy of the plate is given as

$$\Pi=V-A,$$

where V is the energy of elastic deformation (elastic potential) and A is the work of external edge and surface forces. Green's formula is applied to the elastic potential to yield

$$V=\frac{D}{2}\left\{\iint_S w\,\Delta\Delta\, w\,dx\,dy+\sum_{j=1}^{m}\oint_{L_j}\left[(1-\nu)\left(\frac{\partial^2 w}{\partial x^2}\cos^2\alpha+\right.\right.\right.$$
$$\left.+2\frac{\partial^2 w}{\partial x\,\partial y}\sin\alpha\cos\alpha+\frac{\partial^2 w}{\partial y^2}\sin^2\alpha\right)+\nu\Delta w\left.\right]\frac{\partial w}{\partial n}\,dl+$$
$$+\sum_{j=1}^{m}\oint_{L_j}\left\{(1-\nu)\frac{\partial}{\partial l}\left[\left(\frac{\partial^2 w}{\partial x^2}-\frac{\partial^2 w}{\partial y^2}\right)\sin\alpha\cos\alpha-\right.\right.$$
$$\left.-\frac{\partial^2 w}{\partial x\,\partial y}(\cos^2\alpha-\sin^2\alpha)\right]-\left(\frac{\partial^3 w}{\partial x^3}+\frac{\partial^3 w}{\partial x\,\partial y^2}\right)\cos\alpha-\left(\frac{\partial^3 w}{\partial y^3}+\right.$$
$$\left.\left.+\frac{\partial^3 w}{\partial x^2\,\partial y}\right)\sin\alpha\right\}w\,dl+(1-\nu)\sum_{j=1}^{m}\left[\left(\frac{\partial^2 w}{\partial y^2}-\frac{\partial^2 w}{\partial x^2}\right)\sin\alpha\cos\alpha+\right.$$

$$+\frac{\partial^2 w}{\partial x\,\partial y}(\cos^2\alpha - \sin^2\alpha)\Big]w\Big|_{l=l_j}^{l=l_{j+1}}\Big\},$$

and the work of external forces is

$$A=\iint_S qw\,dx\,dy-\sum_{j=1}^{m}\oint_{L_j}M_n\frac{\partial w}{\partial n}\,dl+$$

$$+\sum_{j=1}^{m}\oint_{L_j}\left(Q_n-\frac{\partial M_{nl}}{\partial l}\right)w\,dl+\sum_{j=1}^{m}M_{nl}w\Big|_{l=l_j}^{l=l_{j+1}}.$$

The network system is applied to the plate as is indicated in Figures 2 and 3,

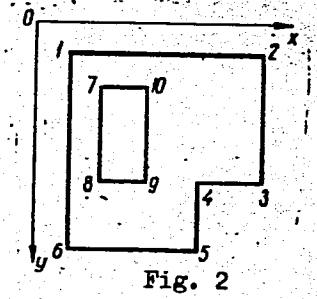


Fig. 2

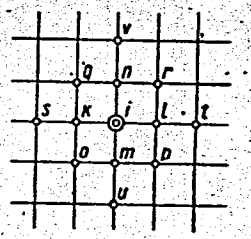


Fig. 3

L 10793-66

ACC NR: AT6001080

where straight line segments $L_j^{(1)}$ are perpendicular to the x-axis and segments $L_j^{(2)}$ are perpendicular to the y-axis. The ensuing quadratic network is used for substituting summation by the rectangular formula into the integral terms of the given energy expression. Differential substitutions are accomplished by computation of central differences. The authors develop and illustrate the mechanics of defining and evaluating the summation terms. The method presented was applied to the formulation of systems of difference equations for plates of variable stiffness, anisotropic plates, contact problems, and shells. The results of the applications are to be published in subsequent articles. Orig. art. has: 10 figures and 8 equations.

SUB CODE: 20/ SUBM DATE: 14May65/ ORIG REF: 002

Card 4/4

DDR/General Problems of Pathology. Immunity U-1

Abs Jour : Ref Zhur - Biol., No 13, 1958, No 60964

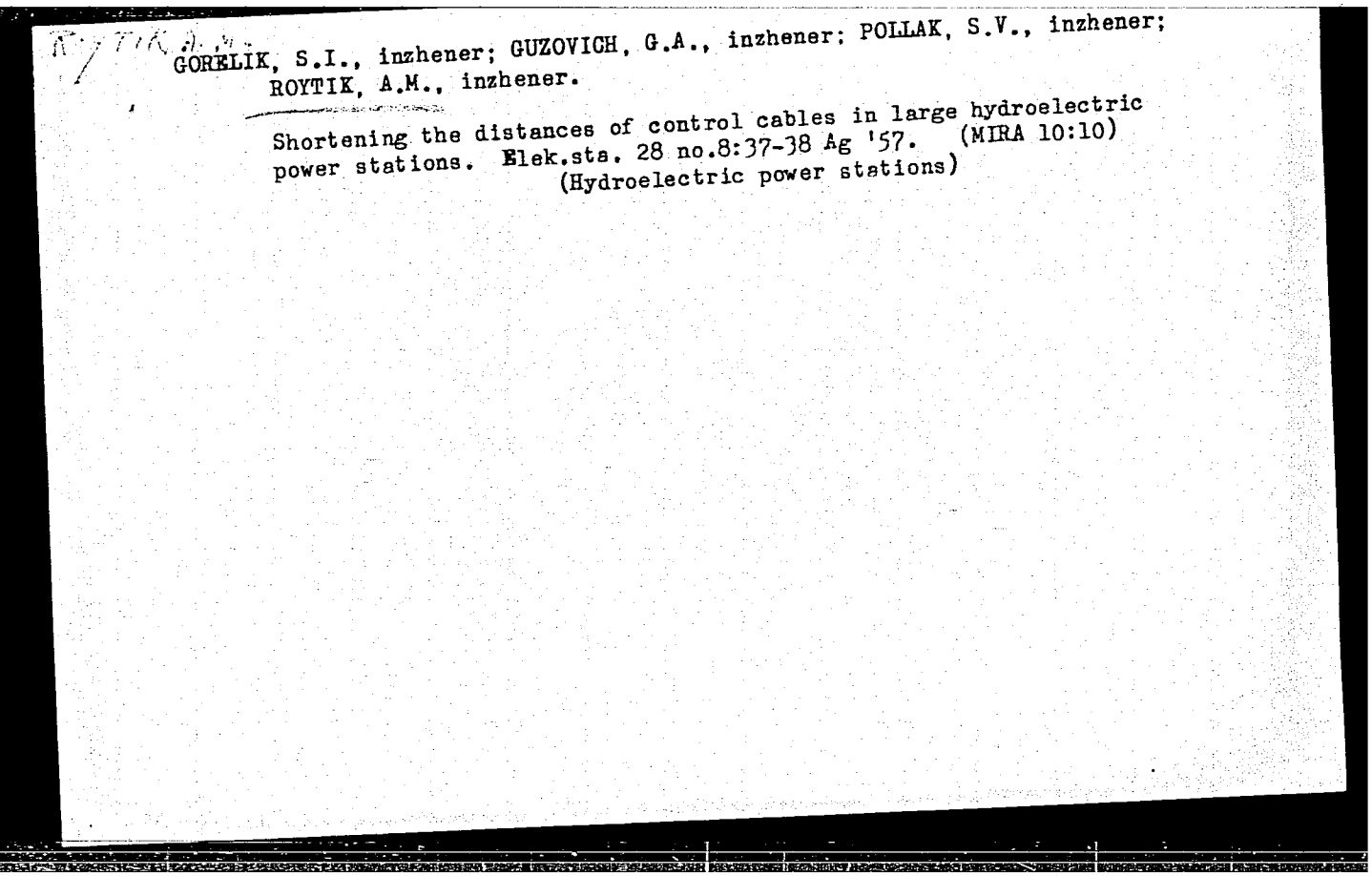
Author : Poganyy I., Royti M.
Inst : -
Title : Changes in the Fractions of Horse Serum when Immunized Against Malignant Anthrax.

Orig Pub : Acta veterin. Acad. sci. hung. 1957, 7, No 1, 95-98

Abstract : A prolonged immunization of horses was made by agar culture of incapsulated bacillus of malignant anthrax (Pasteur Strain II). The culture was first injected subcutaneously, and later intraveneously and subcutaneously at the same time. Investigations made by electrophoresis on starch, of 5 serums, prior to immunization, after subcutaneous injections (after 6 weeks) and as long as the immunization course lasted, revealed: (a corresponding) decrease of the albumen level: plus alpha-globulin from 52.73 to 33.36 and 31.66 percent; of alpha 2 globulin from 12.8 to 4.73 and 3.28 percent; an increase in the content of beta-globulins from 17.5 to 39.23 and 24.2 percent; and of

Card : 1/2

14



GORELIK, S.I., inzhener; GUZOVICH, G.A., inzhener; POLLAK, S.V., inzhener; ROYTIK, A.M., inzhener.

Shortening the distances of control cables in large hydroelectric power stations. Elek.sta. 28 no.8:37-38 Ag '57. (MIRA 10:10)
(Hydroelectric power stations)

L 14995-66 EWP(e)/EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b) IJP(c)
MJW/JD/HW/JG

ACC NR: AP5028567 (N) SOURCE CODE: UR/0126/65/020/005/0785/0787

AUTHOR: Karmanova, Ye. G.; Kuleshova, V. D.; Roytman, A. A.; Knoroz, M. M.

ORG: Northwestern Extramural Polytechnic Institute (Severo-Zapodnyy politekhnicheskiy institut); Leningrad Steel Mill (Lenngradskiy staleprokatnyy zavod)

TITLE: Change in the electrical resistivity of Fe-Co-V alloys of the permendure type

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 5, 1965, 785-787

TOPIC TAGS: alloy system, iron, cobalt, vanadium, resistivity, ordered alloy

ABSTRACT: Deceleration of the ordering process in iron-cobalt alloys containing from 35 to 67.5% cobalt, and its affect on preserving the disordered state by alloying the binary iron-cobalt system with vanadium was investigated. Changes in electric resistivity were studied as a function of temperature for disordered Fe-Co-V alloys. Three industrial alloys with the following chemical contents were used in the study:

UDC: 538.245 : 537.311.31

Card 1/4

L 14995-66
ACC NR: AP5028567

Chemical composition, wt %

Alloy №	C	Mn	Si	P	S	Ni	V	Co
1	0,03	0,16	0,09	0,008	0,011	0,35	1,84	49,80
2	0,03	0,22	0,08	0,006	0,008	0,30	1,76	49,68
3	0,04	0,13	0,14	0,012	0,012	0,23	1,61	50,61

Hot rolled strips of 2 mm thickness were water quenched and cold rolled to a final thickness of 0.2 mm. The preliminary quench and subsequent cold deformation (87%) were necessary for obtaining the disordered state. Samples 250 mm in length were heated in a vacuum to temperatures of 200, 300, 400, 500, 600, 640, 660, 700 and 750°C for periods of 1 and 7 hrs. Relative changes in resistivity were obtained and compared to the cold worked condition.

Card 2/4

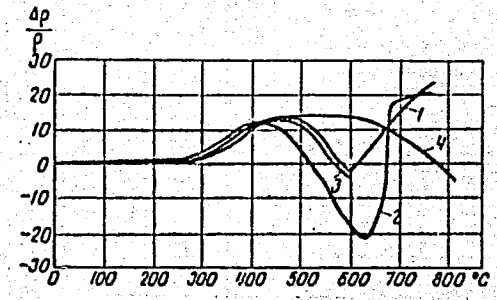


Fig. 1. Change in electric resistivity of cold worked Fe-Co-V alloys as a function of temperature of heating.

In the cold worked (disordered) state the values of electric resistivity for the alloys designated 1-3 were 0.339, 0.331 and 0.342 ohms × mm^2/m, respectively. The maximum in the resistivity change occurred at 400 to 450°C and the minimum at about 600 to 640°C. Curve 1 represents annealing times of 1 hr; curve 2, 7 hrs. The 7 hr annealing time resulted in a steeper minimum with a drop in resistivity of 22%. Above 660°C an increase in resistivity resulted. The significant drop in resistivity was attributed to ordering processes which increased in magnitude with annealing time. The highest degree of ordering occurred at 640°C. Curve 3 was taken from

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L 14995-66
ACC NR: AP5028567

the literature for heating from 200 to 600°C for 1 hr. Curve 4 was taken from Kadykova, G. N., et al [FMM, 1956, 3, 3, 486]. This contradictory curve was obtained for a 1.3% V alloy (permendure) as a function of heating temperature. Orig. art. has: 1 figure, 1 table.

SUB CODE: 11/ SUBM DATE: 09Nov64/ ORIG REF: 003/ OTH REF: 001

Magnetic alloy /8

Card 4/4

ACC NR: AP6006436 SOURCE CODE: UR/0420/65/000/003/0044/0047

AUTHORS: Krasnikov, A. S.; Roytman, A. B.

ORG: none

TITLE: Effects of friction forces on the stability of pipes with flowing liquids

SOURCE: Samoletostroyeniye i tekhnika vozdushnogo flota, no. 3, 1965, 44-47

TOPIC TAGS: pipe vibration, pipe instability, fluid flow, pipe suspension

ABSTRACT: The work of V. I. Feodos'yev (Izbrannyye zadachi i voprosy po soprotivleniyu materialov. Gostekhteorizdat, 1953) on the critical velocity of flow in fluid pipes (lateral instability) is extended to the case of axially restrained pipes. Three cases are considered: a) the left end is fixed and the right end is free in the axial direction (flow to the right); b) the left end free and right end fixed; and c) both ends fixed. The equation for the unbalanced loaded pipe is formulated in integral form, and the solution is found in the form of a series. The equations for the critical velocities for cases a and b are found as

$$V_{2n+1} = \frac{(2n+1)\pi}{l}\sqrt{\frac{EI}{\frac{\gamma}{g}F(2n+1) + C_1 \Pi l \frac{\gamma}{2g}}}.$$

Card 1/2

and $$V_{2n+1} = \frac{(2n+1)\pi}{l}\sqrt{\frac{EI}{(2n+1)\frac{\gamma}{g}F - C_f\Pi l\frac{\gamma}{g}}}.$$

respectively, while no simple solution for case c could be found. Curves of the ratio of frictional to inertial forces as a function of Reynolds number are presented for various pipe diameters, and it is found that for Re = 10 - 10^6 the ratios are higher or near 1. It is concluded that fluid friction is of major importance in pipe stability and that pipe restraint of type a reduced the danger of pipe fatigue. Orig. art. has: 7 formulas and 3 figures.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 003

SOV/32-25-4-21/71

25(6), 24(3)

AUTHOR: Roytman, A. A.

TITLE: The Problem of Magnetic Tests at Cold-rolled Textured Electrotechnical Steel (K voprosu magnitnykh ispytaniy kholodnokatanoy tekstury vannoy elektrotekhnicheskoy stali)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, pp 433-434 (USSR)

ABSTRACT: The types of steel mentioned in the title were investigated. They were made in form of tape rolls (0.03-0.35 mm thick and over). Under equal processing conditions, the degree of the completeness of texture is not the same for different charges and must therefore be determined besides the magnetic properties. The domestic industry unfortunately does not manufacture a suitable anisometer. At the Leningradskiy staleprokatnyy zavod (Leningrad Steel Rolling Mill) the tempering of the samples is carried out jointly with the tape rolls so that the properties of the samples should correspond to those of the metal strips. For samples of thin metal strips (0.03-0.2 mm), bands 1.5-2.5 m long were cut off and wound on a template with 50 mm diameter. Tallow and a suspension of SiO_2 and MgO on the basis of organosilicon varnishes, FG-9 and K-44 and

Card 1/2

The Problem of Magnetic Tests at Cold-rolled Textured Electrotechnical Steel

toluene were used as insulation between the windings. Strips of transformer steel (0.35-0.5 mm thick) were also made in form of rolls. The samples were prepared as packs or - as mentioned above - as toroids. The determination of the specific losses and of the induction of these strips are best carried out with large and small Epstein's devices at frequencies of 50 and 400 cycles per second; the induction measurements should be made in tension fields of 0.001 to 5 oersted with toroidal samples. The calculation of the tension of the field is carried out according to a known equation.

ASSOCIATION: Leningradskiy staleprokatnyy zavod (Leningrad Steel Rolling Mill)

L 3543-66 EPA/EWT(m)/EWP(w)/EPF(c)/EWP(f)/EPF(n)-2/T/ETC(m) WW/EM/DJ
ACCESSION NR: AP5024423 UR/0286/65/000/015/0126/0126

AUTHORS: Krasnikov, A. S.; Berim, I. G.; Roytman, A. B.

TITLE: A damper for an aircraft gas turbine engine. Class 47, No. 173548

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 126

TOPIC TAGS: aircraft engine, gas turbine, engine component

ABSTRACT: This Author Certificate presents a damper for an aircraft gas turbine engine, made in the form of a group of bands bent into open rings and working in oil. To insure the pliability of the damper and to make it work in a small quantity of oil, the rings are so turned in respect to one another that in each pair the opening of one is diametrally opposite to the opening in the other. The openings in the inner rings of the adjacent pairs are turned at an angle to one another. The size of this angle is computed by the formula 360°/n, where n is the number of rings.

ASSOCIATION: none

SUBMITTED: 26Aug63 ENCL: 00 SUB CODE: IE, PR

NO REF SOV: 000 OTHER: 000

Card 1/1

L 3543-66 EPA/EWT(m)/EWP(w)/EPF(c)/EWP(f)/EPF(n)-2/T/ETC(m) WW/EM/DJ
ACCESSION NR: AP5024423 UR/0286/65/000/015/0126/0126

AUTHORS: Krasnikov, A. S.; Berim, I. G.; Roytman, A. B.

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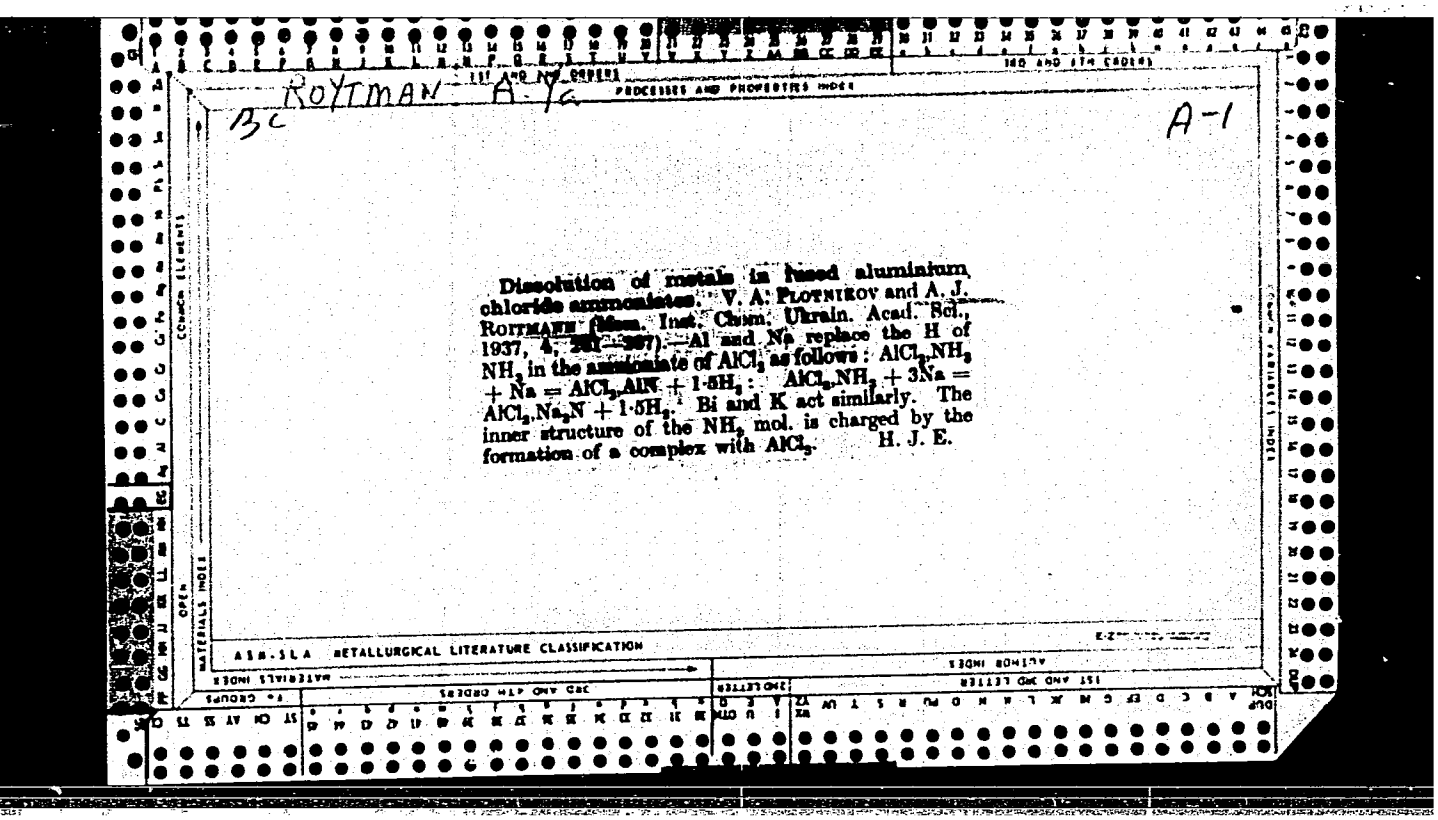
ASSOCIATION: none

SUBMITTED: 26Aug63 ENCL: 00 SUB CODE: IE, PR

NO REF SOV: 000 OTHER: 000

Card 1/1



ROYTMAN A-Ya

3c

A-1

Dissolution of metals in fused aluminium chloride ammoniates. V. A. PLOTNIKOV and A. J. ROITMAN (Mem. Inst. Chem. Ukrain. Acad. Sci., 1937, 4, 281–287).—Al and Na replace the H of NH_3 in the ammoniate of $AlCl_3$ as follows: $AlCl_3.NH_3 + Na = AlCl_3.AlN + 1{\cdot}5H_2$; $AlCl_3.NH_3 + 3Na = AlCl_3.Na_3N + 1{\cdot}5H_2$. Bi and K act similarly. The inner structure of the NH_3 mol. is charged by the formation of a complex with $AlCl_3$. H. J. E.

ROYTMAN, A. Y.

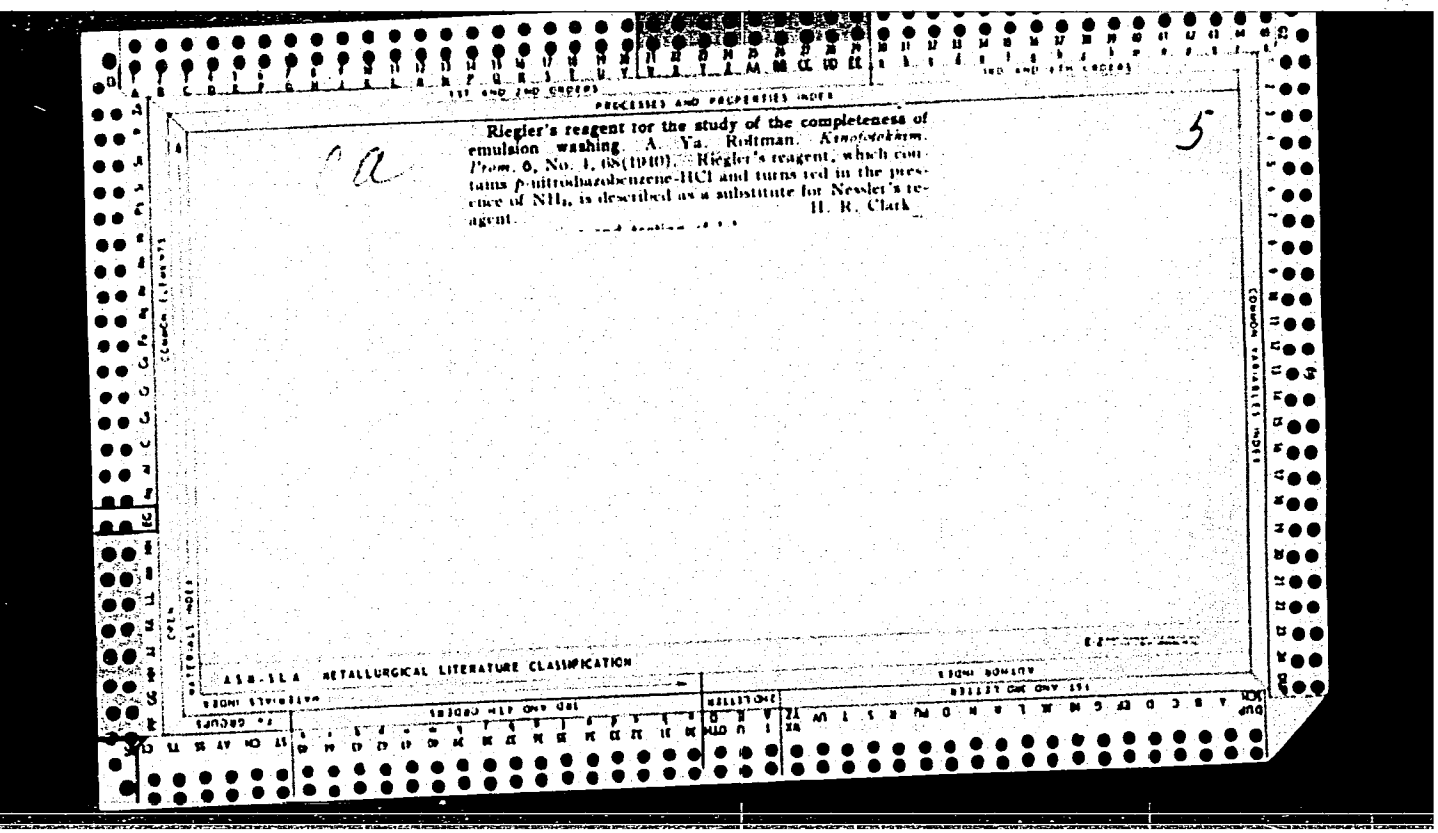
"Iditol--A Substitute for Fir Balsam in Histological Practice" Arkhiv. Patol. 11, No. 3, 1949. (Kiev) -c1949-.

CA ROYTMAN, A. Ya.

31

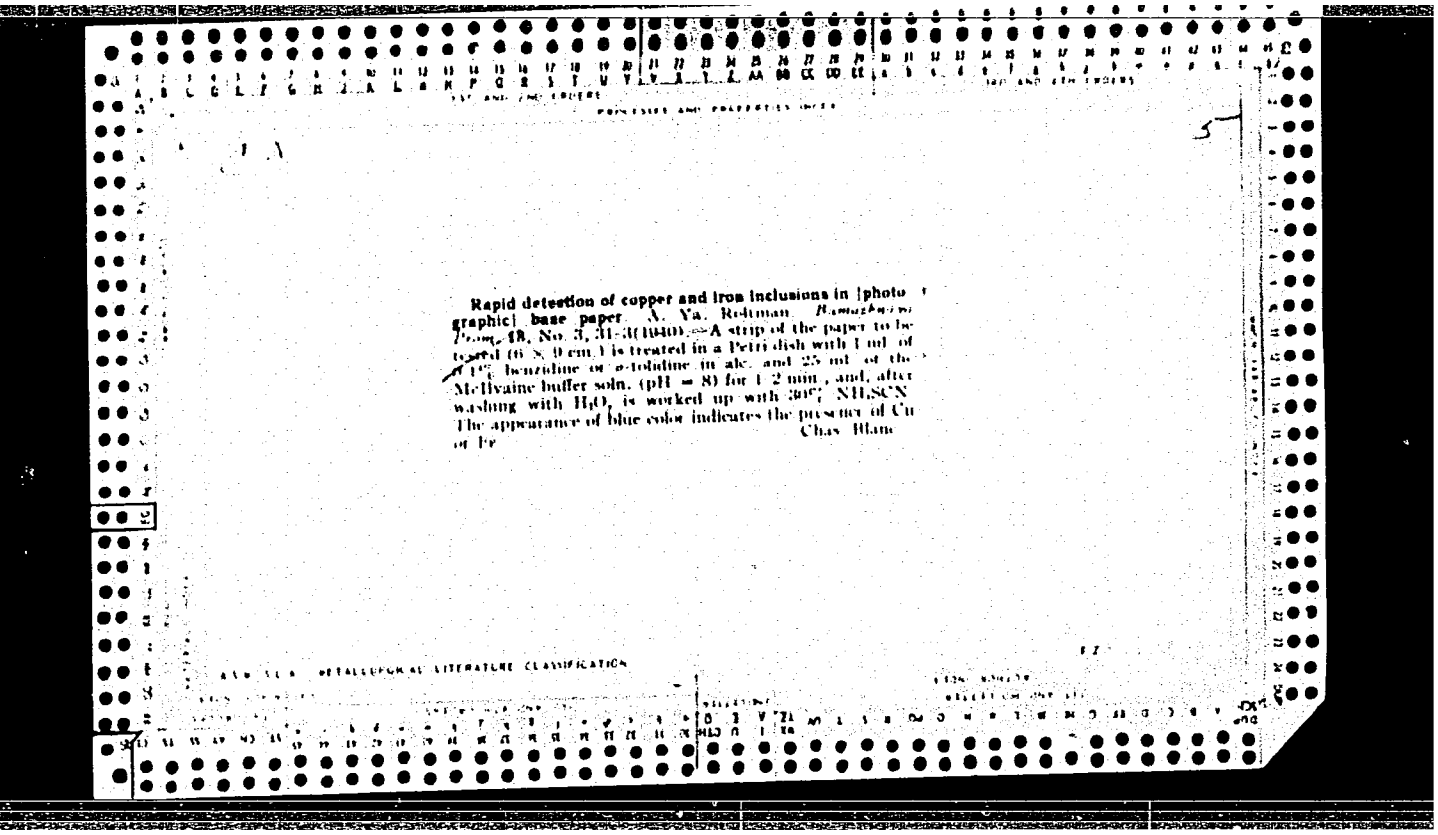
Iditol—a substitute of pine balsam in histological practice. M. K. Dal and A. Ya. Roitman. *Arkh. Patol.* 11, No. 3, 93-3(1949).—Iditol—a Soviet-made phenol-formaldehyde condensate—is readily sol. in EtOH at 40–50° forming a liquid closely comparable physically with pine or Canada balsams. It m. 95–105°, and has n_D 1.5–1.51, i.e. very close to common glasses. It can be satisfactorily used for mounting histological slides.

G. M. Kosolapoff



Riegler's reagent for the study of the completeness of emulsion washing. A. Ya. Roitman. *Khimicheskim. Prom.* 6, No. 1, 68(1940). Riegler's reagent, which contains *p*-nitrodiazobenzene-HCl and turns red in the presence of NH_3, is described as a substitute for Nessler's reagent. H. R. Clark

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Rapid detection of copper and iron inclusions in [photographic] base paper. A. Ya. Rotman. *Bumazhnaya Prom.* 18, No. 3, 31-3(1940).—A strip of the paper to be tested (6 × 9 cm.) is treated in a Petri dish with 1 ml. of 1% benzidine or o-tolidine in alc. and 25 ml. of the McIlvaine buffer soln. (pH = 8) for 1–2 min., and, after washing with H_2O, is worked up with 30% NH_4SCN. The appearance of blue color indicates the presence of Cu or Fe.

Chas. Blanc

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445520012-7

CA

5

PROCESSES AND PROPERTIES INDEX

Rapid control method for subbing of photographic papers. A. Ya. Roltman. *Kinofotokhim. Prom.* 6, No. 9, 57 S(1940); cf. C. A. 34, 1670. R. describes a very simple and rapid method for testing the quality of subbing during production by means of a single reagent soln. Two stock solns. of 25% NH_4CNS and 0.5% al o-tolidine were mixed in the ratio 9:1 and a sample of the subbed paper was dipped into it. The appearance of blue spots indicates that white spots have been formed after emulsion coating. The soln. can be used for about 1 working day. About 30% of the spots appearing after this test will be noticeable after development to a medium d. This indicates that the test with o-tolidine is very sensitive. A test revealed that these points are due to Cu inclusions. The same immersion test with o-tolidine and H_2O_2 showed the presence of Fe^{++} in the subbed paper. These spots will develop as black spots in the emulsion. By this double test, therefore, spots that will be black and white spots in the emulsion can be discovered earlier in the subbed paper.

W. R. Eichler

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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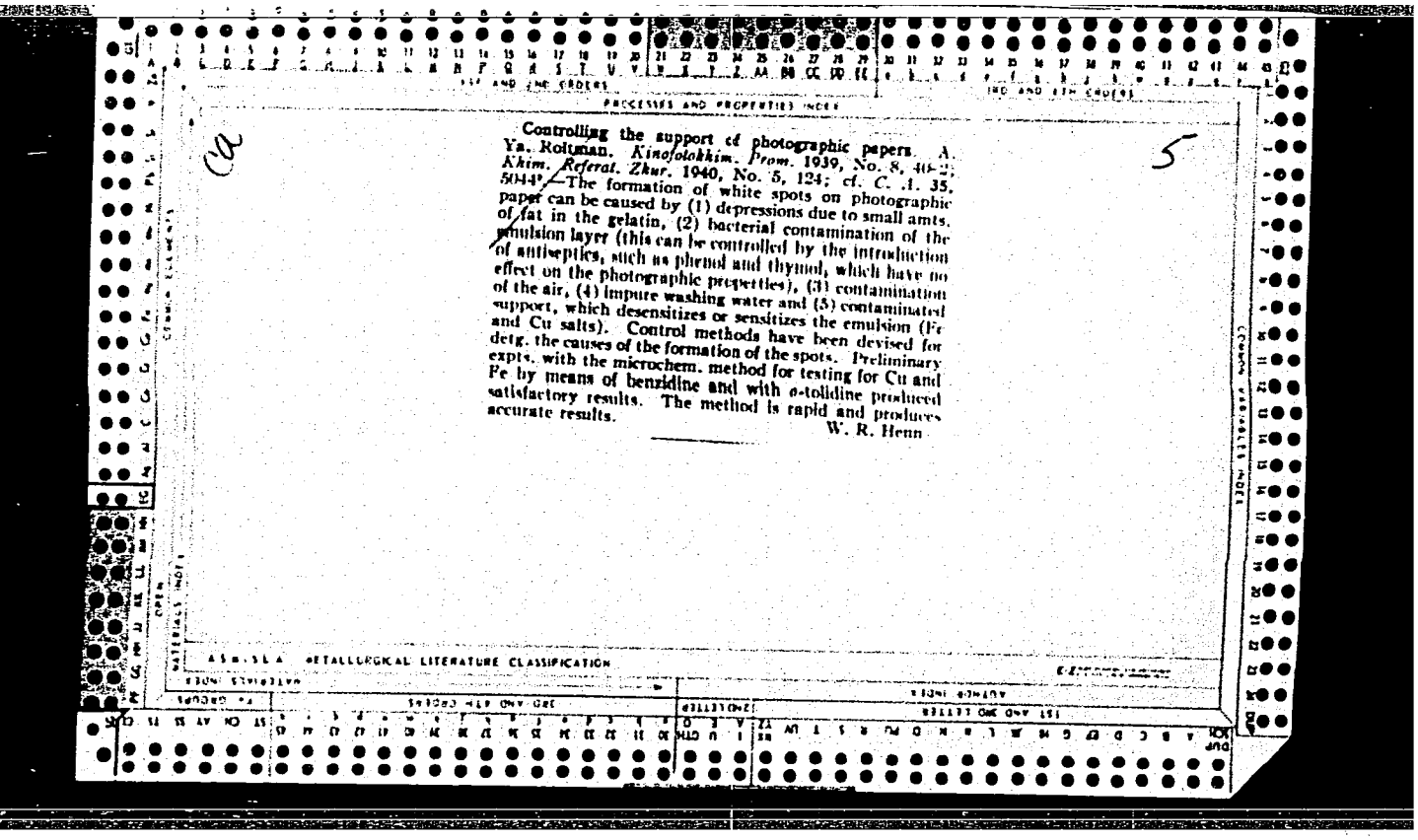
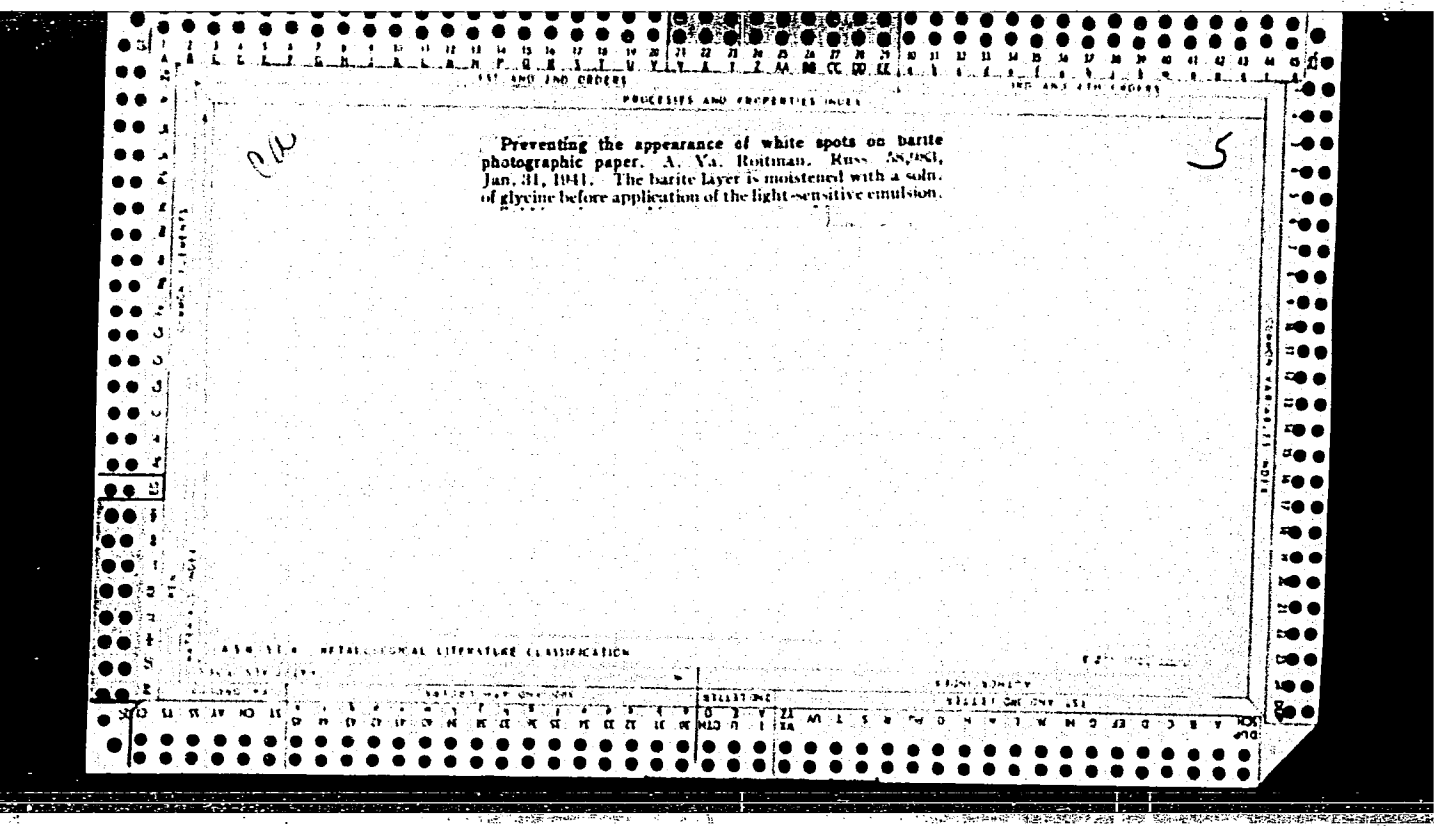


PROCESSES AND PROPERTIES INDEX

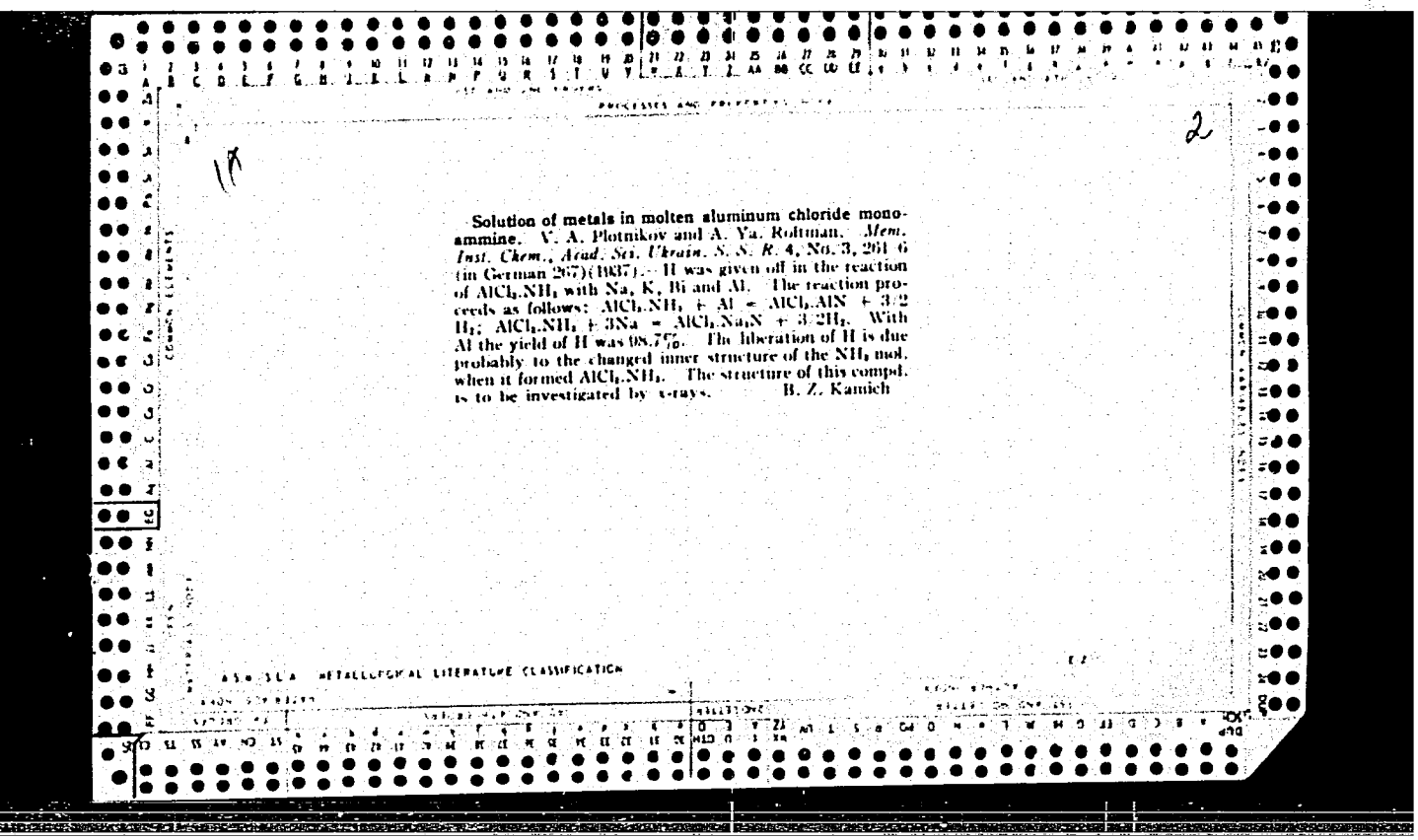
Controlling the support of photographic papers. A. Ya. Roitman. *Kinofotokhim. Prom.* 1939, No. 8, 40-2; *Khim. Referat. Zhur.* 1940, No. 5, 124; cf. *C. A.* 35, 5044⁹.—The formation of white spots on photographic paper can be caused by (1) depressions due to small amts. of fat in the gelatin, (2) bacterial contamination of the emulsion layer (this can be controlled by the introduction of antiseptics, such as phenol and thymol, which have no effect on the photographic properties), (3) contamination of the air, (4) impure washing water and (5) contaminated support, which desensitizes or sensitizes the emulsion (Fe and Cu salts). Control methods have been devised for detg. the causes of the formation of the spots. Preliminary expts. with the microchem. method for testing for Cu and Fe by means of benzidine and with *o*-tolidine produced satisfactory results. The method is rapid and produces accurate results.

W. R. Henn

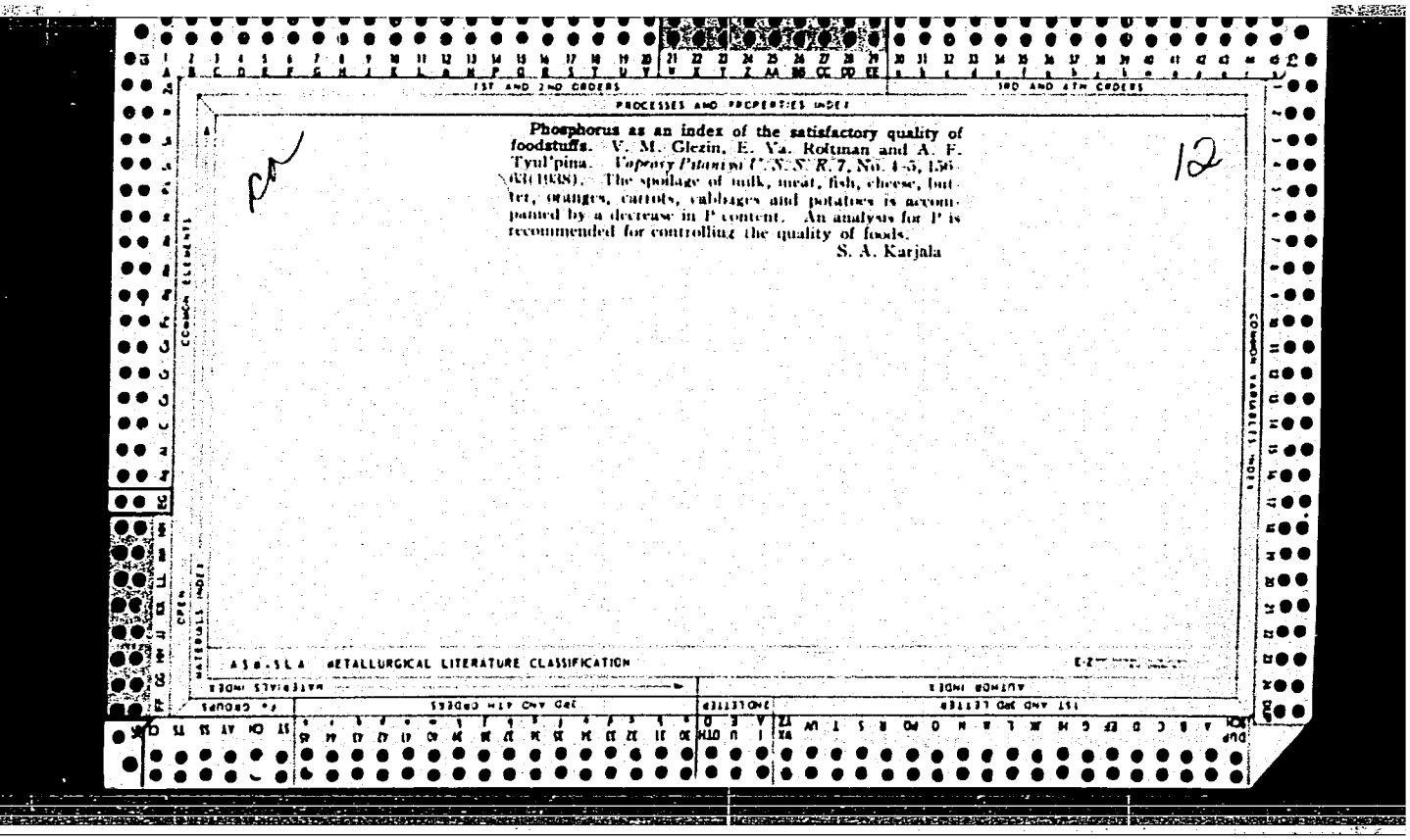
A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION



Preventing the appearance of white spots on barite photographic paper. A. Ya. Roitman. Russ 48,083, Jan. 31, 1941. The barite layer is moistened with a soln. of glycine before application of the light-sensitive emulsion.



Solution of metals in molten aluminum chloride monoammine. V. A. Plotnikov and A. Ya. Roitman. *Mem. Inst. Chem., Acad. Sci. Ukrain. S. S. R.* 4, No. 3, 261-6 (in German 267)(1937).—H was given off in the reaction of $AlCl_3.NH_3$ with Na, K, Bi and Al. The reaction proceeds as follows: $AlCl_3.NH_3 + Al = AlCl_3.AlN + 3/2\ H_2$; $AlCl_3.NH_3 + 3Na = AlCl_3.Na_3N + 3/2H_2$. With Al the yield of H was 98.7%. The liberation of H is due probably to the changed inner structure of the NH_3 mol. when it formed $AlCl_3.NH_3$. The structure of this compd. is to be investigated by x-rays. B. Z. Kamich



1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Phosphorus as an index of the satisfactory quality of foodstuffs. V. M. Glezin, E. Va. Roltman and A. F. Tyul'pina. *Voprosy Pitaniya* (U.S.S.R.) 7, No. 4-5, 156 (1938). The spoilage of milk, meat, fish, cheese, butter, oranges, carrots, cabbages and potatoes is accompanied by a decrease in P content. An analysis for P is recommended for controlling the quality of foods.

S. A. Karjala

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COMMON ELEMENTS

OPEN

METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

1ST AND 2ND LETTER

3RD AND 4TH CODES

MATERIALS INDEX

4TH CODES

ROYTMAN, A. YA. 600

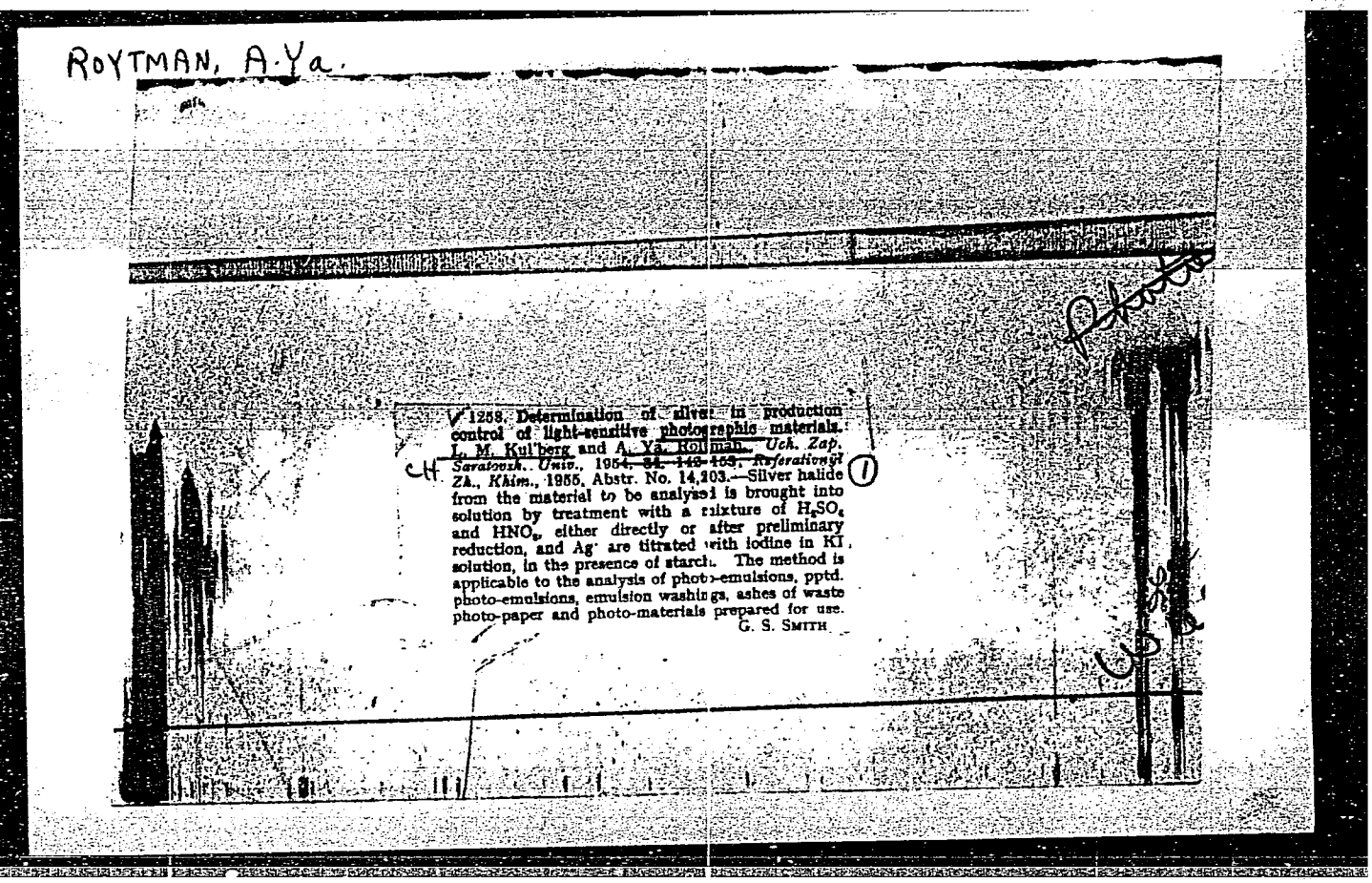
1. ROYTMAN, A. YA.

2. USSR (600)

4. Photography - Papers

7. Improving the quality of photographic paper., Bum. prom. no.6, 1951. Laboratoriya Kiyevskoy Fotobumazhony Fabriki

9. Monthly List of Russian Accessions, Library of Congress, April 1952, Unclass.



ROYTMAN, A.Ya.

1258. Determination of silver in production control of light-sensitive photographic materials. L. M. Kul'berg and A. Ya. Roitman. *Uch. Zap. Saratovsk. Univ.*, 1954, 34, 143-153; *Referativnyi Zh., Khim.*, 1955, Abstr. No. 14,203.—Silver halide from the material to be analysed is brought into solution by treatment with a mixture of H_2SO_4 and HNO_3 either directly or after preliminary reduction, and Ag^+ are titrated with iodine in KI solution, in the presence of starch. The method is applicable to the analysis of photo-emulsions, pptd. photo-emulsions, emulsion washings, ashes of waste photo-paper and photo-materials prepared for use.

G. S. SMITH

ROYTMAN, A. Ya.

May/Jun 49

USSR/Medicine - Iditol
Histology

"Iditol, a Substitute for Fir Balsam in Histological Practice," M. K. Dal', A. Ya. Roytman, Kiev, 1½ pp

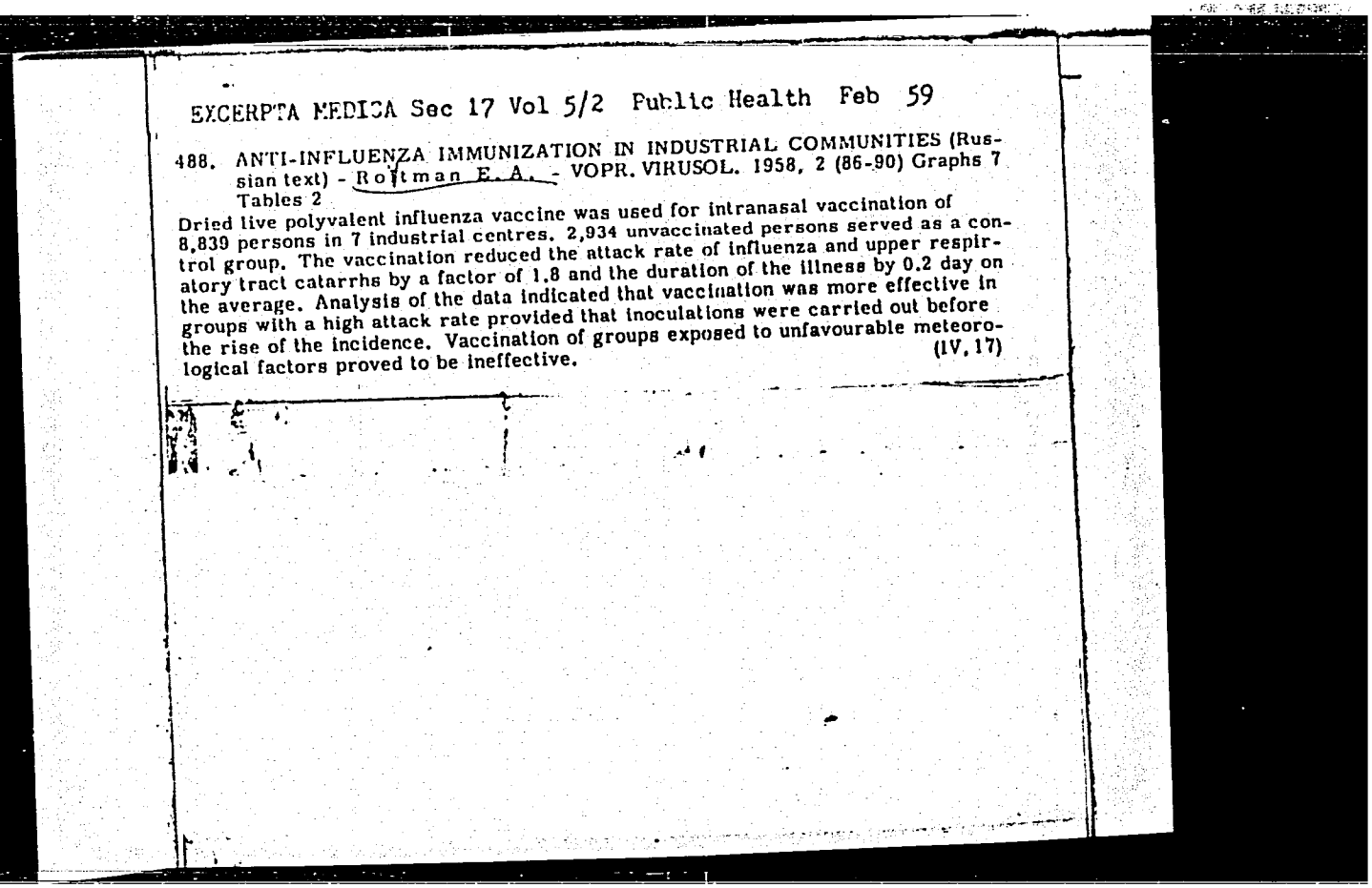
"Arkh Patol" No 3

Discusses physical properties of iditol preparations made for use in histological practice. Its price is about 6 rubles per kg in comparison to 315 rubles per kg of fir balsam. Cites tests carried out in the Kiev Tuberculosis Inst on the Suitability of iditol as a substitute for fir balsam. Results were completely satisfactory.

PA 1/50T41

AKBROYT, D.,., inzhener; VINOGRADOV, G.T., inzhener; VOSKOBOYNIK, N.S., inzhener; ROYTMAN, B.M., inzhener.

Combined erection of boilers and metal structural elements using tower cranes. Elek.sta. 27 no.11:49-50 N '56. (MLRA 10:1)
(Cranes, derricks, etc) (Boilers) (Electric power plants)



EXCERPTA MEDICA Sec 17 Vol 5/2 Public Health Feb 59

488. ANTI-INFLUENZA IMMUNIZATION IN INDUSTRIAL COMMUNITIES (Russian text) - Roitman E. A. - VOPR. VIRUSOL. 1958, 2 (86-90) Graphs 7 Tables 2

Dried live polyvalent influenza vaccine was used for intranasal vaccination of 8,839 persons in 7 industrial centres. 2,934 unvaccinated persons served as a control group. The vaccination reduced the attack rate of influenza and upper respiratory tract catarrhs by a factor of 1.8 and the duration of the illness by 0.2 day on the average. Analysis of the data indicated that vaccination was more effective in groups with a high attack rate provided that inoculations were carried out before the rise of the incidence. Vaccination of groups exposed to unfavourable meteorological factors proved to be ineffective. (IV, 17)

KRITSKIY, G.A.; ROYTMAN, F.I.

Nucleotide metabolism in the bone marros under normal conditions and following X irradiation. Biokhimiia 26 no. 1:148-154 Ja-F '61. (MIRA 14:2)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R., Moscow.
(MARROW) (X RAYS—PHYSIOLOGICAL EFFECT) (NUCLEOTIDES)

ROYTMAN, I., mayor; ANDREYEV, I., kapitan

In order to conduct fire independently. Voen. vest. 42 no.1: 110-113 Ja '63. (MIRA 17:4)

BOTVINNIKOV, Aleksandr Davidovich, kand. ped. nauk; ROYTMAN, Izrail' Abramovich; ANOKHIN, Grigoriy Aleksandrovich; SHAPOSHNIKOVA, A.A., red.; NOVOSELOVA, V.V., tekhn.red.

[Teaching the reading of mechanical drawings during the vocational training of students] Obuchenie chteniiu chertezhei v protsesse professional'noi podgotovki uchashchikhsia. Moskva, Izd-vo APN RSFSR, 1962. 172 p. (MIRA 16:10)

(Mechanical drawing--Study and teaching)

ROYTMAN, I.A. (Moscow).

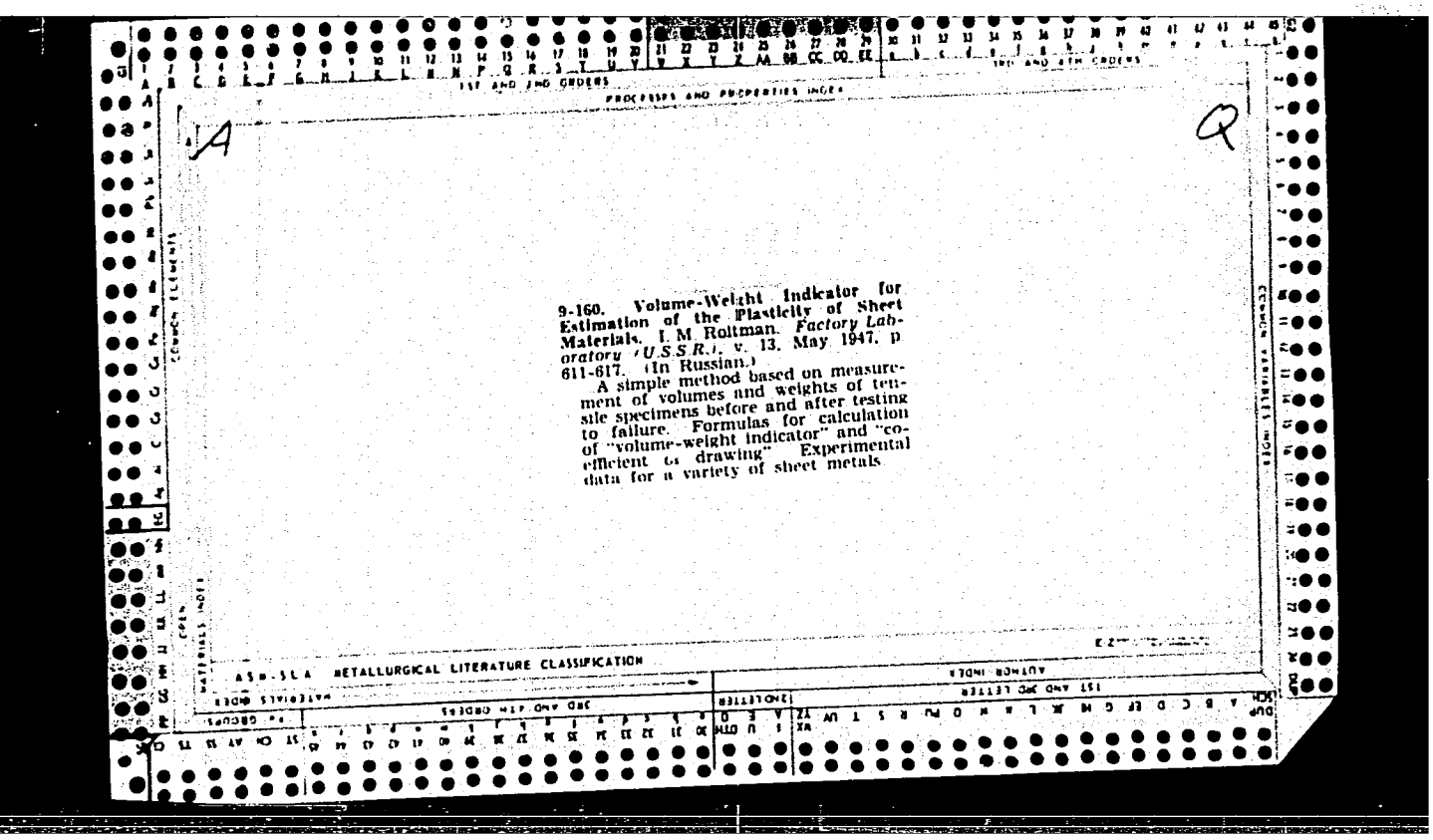
Reading and detailing of the simplest assembly drawings. Politekh. obuch. no.6:43-47 Je '58. (MIRA 11:6)
(Mechanical drawing)

ROYTMAN, I.A.

Photocopying of drawings in school. Politekh.obuch. no.10:50-53 O '58. (MIRA 11:11)
(Lumiprints--Equipment and supplies)

ROYTMAN, I.A. (Moskva).

Using the method of orthogonal projections for solving stereometric problem. Mat.v shkole no.6:39-43 N-D '56. (MLRA 10:1)
(Geometry, Projective--Study and teaching)

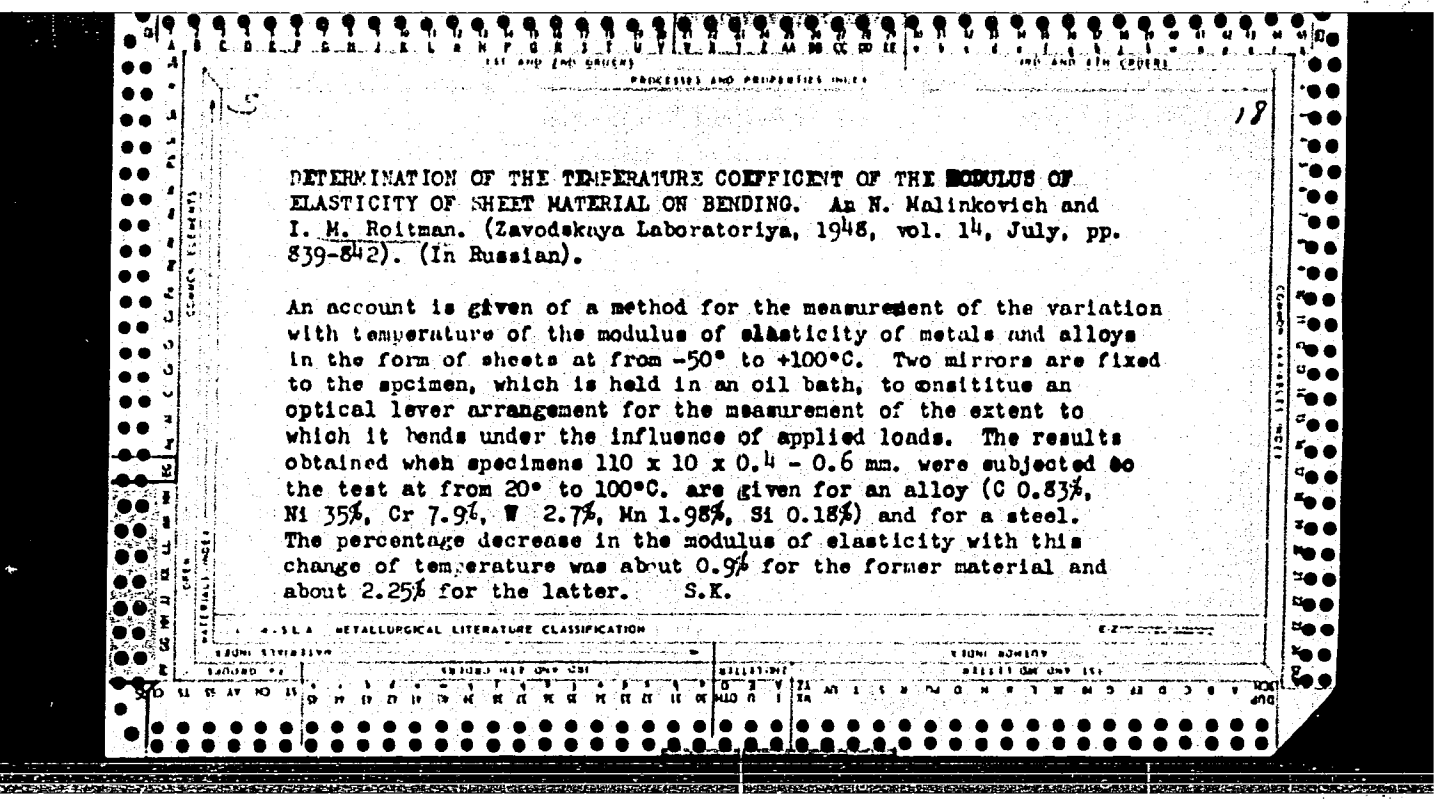


9-160. Volume-Weight Indicator for Estimation of the Plasticity of Sheet Materials. I. M. Roitman. *Factory Laboratory (U.S.S.R.)*, v. 13, May 1947. p 611-617. (In Russian.)

A simple method based on measurement of volumes and weights of tensile specimens before and after testing to failure. Formulas for calculation of "volume-weight indicator" and "coefficient of drawing". Experimental data for a variety of sheet metals.

ROYTMAN, I. M. and FRIDMAN, Ya. B.

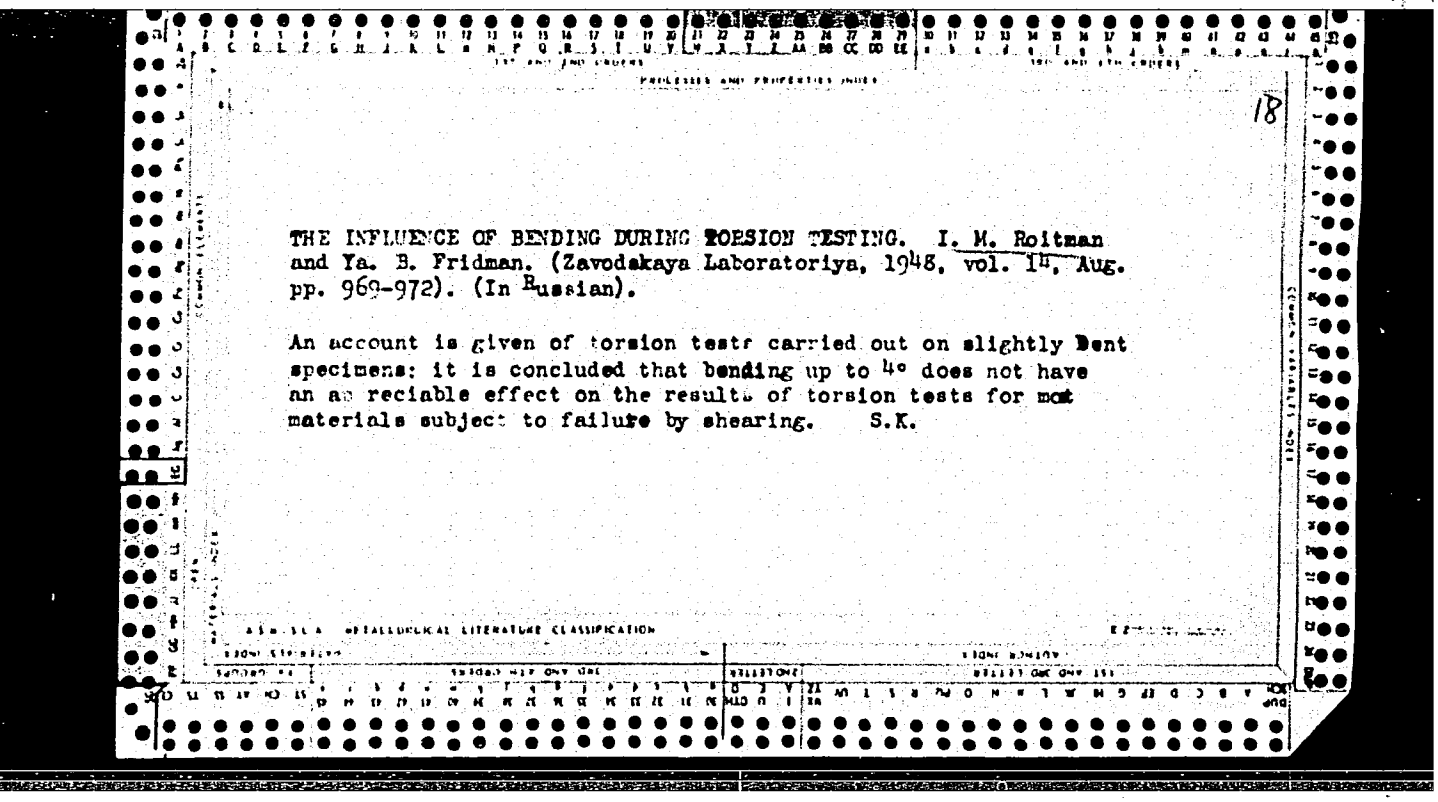
"The Influence of Alternating Plastic Deformation on the Non-Equilibrium Alloys," Dok. AN, 57, No. 9, 1947



18

DETERMINATION OF THE TEMPERATURE COEFFICIENT OF THE MODULUS OF ELASTICITY OF SHEET MATERIAL ON BENDING. An N. Malinkovich and I. M. Roitman. (Zavodskaya Laboratoriya, 1948, vol. 14, July, pp. 839-842). (In Russian).

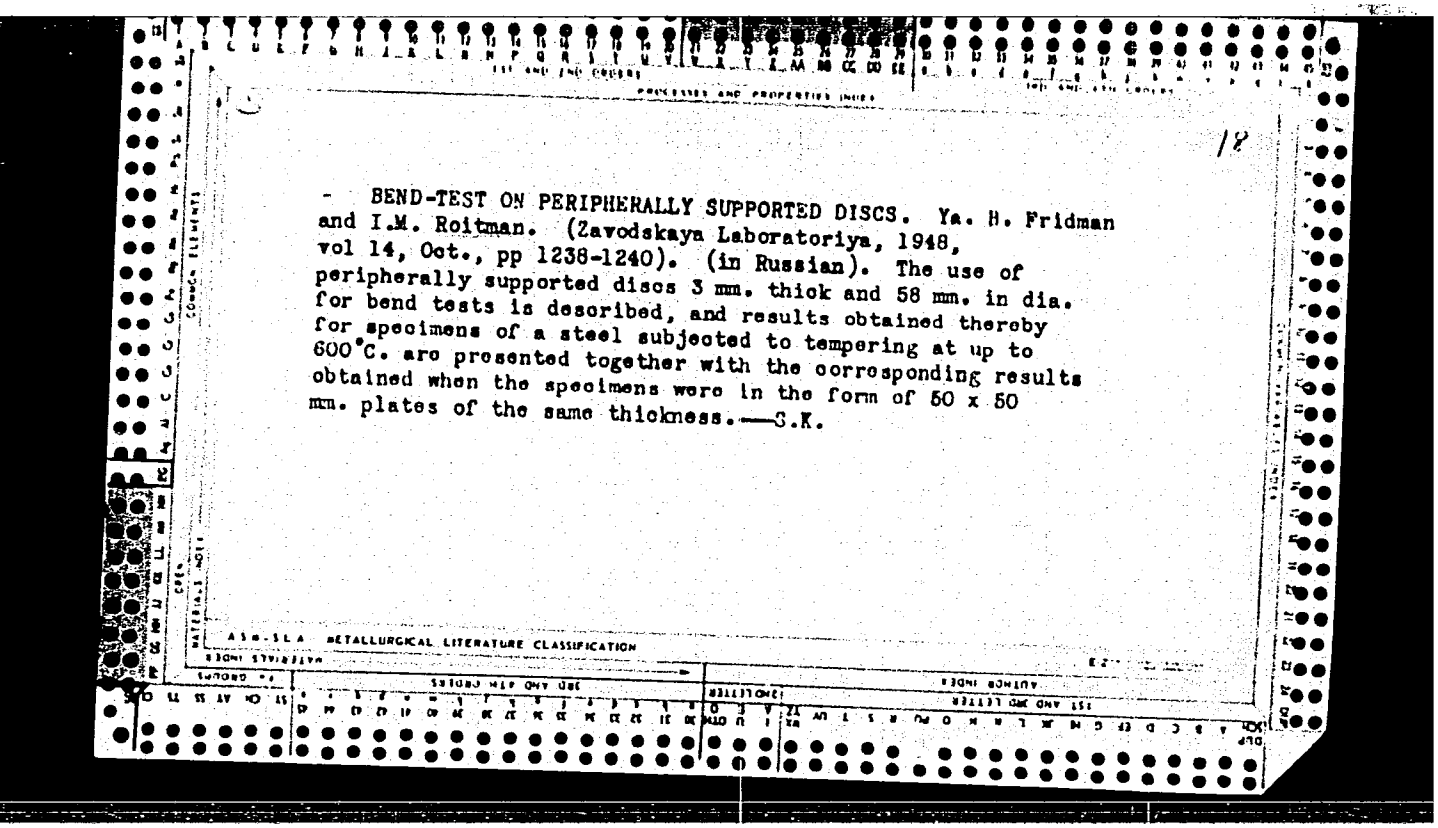
An account is given of a method for the measurement of the variation with temperature of the modulus of elasticity of metals and alloys in the form of sheets at from -50° to +100°C. Two mirrors are fixed to the specimen, which is held in an oil bath, to constitute an optical lever arrangement for the measurement of the extent to which it bends under the influence of applied loads. The results obtained when specimens 110 x 10 x 0.4 - 0.6 mm. were subjected to the test at from 20° to 100°C. are given for an alloy (C 0.83%, Ni 35%, Cr 7.9%, W 2.7%, Mn 1.98%, Si 0.18%) and for a steel. The percentage decrease in the modulus of elasticity with this change of temperature was about 0.9% for the former material and about 2.25% for the latter. S.K.



18

THE INFLUENCE OF BENDING DURING TORSION TESTING. I. M. Roitman and Ya. B. Fridman. (Zavodskaya Laboratoriya, 1948, vol. 14, Aug. pp. 969-972). (In Russian).

An account is given of torsion tests carried out on slightly bent specimens: it is concluded that bending up to 4° does not have an appreciable effect on the results of torsion tests for most materials subject to failure by shearing. S.K.



18

- BEND-TEST ON PERIPHERALLY SUPPORTED DISCS. Ya. B. Fridman and I.M. Roitman. (Zavodskaya Laboratoriya, 1948, vol 14, Oct., pp 1238-1240). (in Russian). The use of peripherally supported discs 3 mm. thick and 58 mm. in dia. for bend tests is described, and results obtained thereby for specimens of a steel subjected to tempering at up to 600°C. are presented together with the corresponding results obtained when the specimens were in the form of 50 x 50 mm. plates of the same thickness.—S.K.

ROYTMAN, I. M.

Mbr., All-Union Inst. Aviation Materials, -c1948-.

"Determing the Temperature Coefficient of the Elastic Module in Lamina Subjected to Bending Stress," Zavod. Lab., 14, No. 7, 1948;

"Effect of Bending during Torsion in Testing," ibid, No. 8, 1948;

"Micromechanical Method of Studying Materials," Zhur. Tekh. Fiz. No. 3, 1949;

"Methods of Micromechanical Testing," Zavod Lab., 16, No.5, 1950;

"Application of the Micromechanical Method to investigation of Zonal Properties in the Welded Joint," ibid, No.6, 1950.

ROYTMAN, I. M. Cand. Tech. Sci.

Dissertation: "Micromechanical Method for Testing Metals."

5 Oct. 49

Scientific Council of the All Union Sci. Res. Inst. of Aviation Materials

SO Vecheryaya Moskva
Sum 71

ROYTMAN, I. M.

PA 38/49T83

USSR/Engineering Mar 49
Stress Analysis
Strength - Testing

"Micromechanical Method of Studying Materials," I. M. Roytman, Ya. B. Fridman, 10 pp

"Zhur Tekh Fiz" Vol XIX, No 3, pp. 424-30

Developed micromechanical method to test materials under tension, bending, torsion, and shearing. Worked out new construction for universal "micromachine," which permits static tests to be carried out under various forms of load. Introduces example using micromechanical method to study the dimensional factor, the deformed state in the neck

38/49T83

USSR/Engineering (Comtd) Mar 49

of elongated sample, and mechanical characteristics in various parts of welded joints. Submitted 23 Nov 48.

38/49T83

USSR/Metals - Tests, Micromechanical May 50
Testing Procedures

"Methods of Micromechanical Testing," I. M. Roytman, Ye. B. Fridman, 1½ pp

"Zavod Lab" Vol XVI, No 5

PA 160T76

Briefly reviews development of methods for micromechanical investigation of metals, describes microspecimens and equipment, and discusses accuracy of micromechanical methods, effect of machining on properties of microspecimens, and influence of scale factor on experimental results

160T76

USSR/Metals - Tests, Micromechanical (Contd) May 50

Evaluates significance of micromechanical methods in solution of numerous theoretical and practical problems and enumerates purposes of possible application of these methods.

160T76

ROYTMAN, I. M.

ROYTMAN, I. M.

1

New Machine for Fatigue-Tests on Thin Sheet Metal. I. M. Roitman. (*Zavodskaya Laboratoriya*, 1955, 21, (8), 983–985). [In Russian]. A new fatigue-testing machine, developed at the Soviet Weights and Apparatus Research Institute, is described in which the thin test-piece is subjected to pure bending. Test pieces 0·2–1 mm thick can be subjected to maximal bending moments of ± 15 kg/cm with a symmetrical loading cycle of 22 kg/cm when the cycle is non-symmetrical, the maximal deflection and cyclic loading frequency being ± 30° C and 50 cycles/s. The theory of producing pure bending at high frequencies is considered and data are given on the accuracy of test results.—S. K.

ROYTMAN, I.M.

Method of Observing the Alternating Cyclic Load of Hydraulic-Pulsating Testing Machines. I. M. Roitman. (*Zavodskaya Laboratoriya*, 1955, 21, (11), 1378-1380). [In Russian]. The incorrect results often obtained with existing methods of operating the valve in the registering system of devices for measuring alternating cyclic loads produced by hydraulic pulsators are considered, and an improved method is described. The method is based on changing the rate of rotation of the valve in such a way that the frequency with which the manometers are connected to the working space of the cylinder differs by a certain amount from the pulsator frequency. A variable cyclic load or only its limiting values can be observed or recorded.—S. K.

Sci Res Inst. measuring instruments
(NII resov i priborov)

ROYTMAN, I.M.

Methods of checking one-way hydraulic pulsator testing machines. Izm. tekh.no.2:61-65 Mr-Ap '56. (MLRA 9:7)
(Testing machines) (Dynamometer)

ROYTMAN, I.M.

Category : USSR/Solid State Physics - Mechanical Properties of Crystals and Polycrystalline Compounds E-9

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3963

Author : Roytman, I.M.
Title : Development of a Micromechanical Method of Materials Testing

Orig Pub : Zavod. laboratoriya, 1956, 22, No 7, 834-840

Abstract : No abstract

Card : 1/1

ROYTMAN, I. M.

"Development of the Micro-Mechanical Method of Testing Materials," I. M. Roitman. (*Zavodskaya Laboratoriya*, 1956, 22, (7), 834-840). [In Russian]. Micro-mechanical testing machines are divided into two groups according to the principles of their operations. Examples of each type are considered, their construction and operating characteristics being outlined.—S. K.

ROTMAN, I. M.

P 3

PHASE I BOOK EXPLOITATION SOV/3891

Moscow. Nauchno-issledovatel'skiy institut vesov i priborov

Vesoizmeritel'nyye pribory i ispytatel'nyye mashiny; teoriya i raschet, [vyp. 1] (Load-Measuring Devices and Testing Machinery; Theory and Design, [no. 1]) Moscow, Mashgiz, 1959. 178 p. 3,600 copies printed.

Sponsoring Agency: RSFSR. Moskovskiy ekonomicheskiy rayon. Sovet narodnogo khozyaystva.

Ed.: N.A. Mironov, Engineer; Ed. of Publishing House: L.G. Prokof'yeva; Tech. Eds: Z.I. Chernova and V.D. El'kind; Managing Ed. for Literature on Machine and Instrument Construction (Mashgiz): N.V. Pokrovskiy, Engineer.

PURPOSE: This collection of articles is intended for scientific workers and technical personnel specializing in weighing devices, instrument construction, and related fields. It may also be useful to students of schools of higher technical education.

Card 1/ 3

COVERAGE: This collection of articles contains results of theoretical and experimental investigations of weighing and testing machines. The investigations were conducted by the Nauchno-issledovatel'skiy institut vesov i priborov (Scientific Research Institute for Weights and Instruments). The articles deal with analysis of errors in dial-type automatically balanced indicators and methods for designing indicator elements, experimental investigaton of elastic imperfections in springs used for measuring forces, analysis of accuracy in dynamic-load measurement with high-frequency fatigue-testing machines, and the relation between the error of measurement of cyclic reversed loads and the degree of damping of oscillations of an elastic element. Also discussed are measurement of the accuracy of forces in a water tunnel and a method of checking indicators of hydraulically actuated fatigue-testing machines. References follow several of the articles.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

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8-25-60

Card 3/3

KANER, B.L.; ROYTMAN, K.Ya.

Taking problems of safety into account during the placement of equipment in outdoor units. Zhur. VKHO 9 no. 3:319-324 '64. (MIRA 17:9)

ROYTMAN, L.I.

Spinal rhinogenic emphysema of the eyelids. Vest.otorin. 21 no.4:92 Jl-Ag '59. (MIRA 12:10)

1. Iz bol'nitsy stantsii Makhachkala-Port Ordzhonikidzevskoy zheleznoy dorogi.
(EMPHYSEMA) (EYELIDS--DISEASES)

SOV/112-59-1-1299

8(0)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 175 (USSR)

AUTHOR: Roytman, L. M., and Belozerskiy, S. S.

TITLE: Measuring and Controlling Small Fluid and Gas Discharges by Magnetic-Transmission Rotameters

PERIODICAL: Novosti neft. tekhn. Neftepererabotka, 1957, Nr 7, pp 21-24

ABSTRACT: Soviet constant-drop rotametric flowmeters with movable resistance can be subdivided into two groups: (1) low-pressure, up to 6 kg/cm^2; (2) high-pressure, 10-100 kg/cm^2. Each group can be subdivided into indicating, recording, and regulating instruments. Designs of some rotameters are discussed. The electric follow-up system is replaced by a permanent magnet system in the rotameter described in the article. The essence of the magnetic system is that a permanent magnet carried by the rotor causes a displacement of two external magnets which move the indicating pointer in the direct-reading instrument. For remote measuring, the instrument is equipped with a

Card 1/2

Measuring and Controlling Small Fluid and Gas Discharges by Magnetic- . . . .

pneumatic system which varies the output air pressure in proportion with the pointer position. In this case, a conventional pressure gauge of 0-1 kg/cm^2 or a type MS sylphon pressure gauge can be used as an indicating instrument. The magnetic-transmission rotameter comprises three major parts: a measuring assembly, a pointer-and-lever mechanism, and a pneumatic device; design features of these parts are described in detail. Function of the magnetic-follow-up rotameter is explained, its appearance and a scheme of automatic control of a liquid or gas discharge are described, and technical instrument data is submitted. Examples of instrument application are given.

N. Ya. K.

ROYTMAN, M., kand.tekhn.nauk; BARANOVSKIY, R., inzh.

Evacuation of the public from motion-picture theaters. Pozh.delo 7 no.3:10 Mr '61. (MIRA 14:5)
(Motion-picture theaters--Fires and fire prevention)

ROYTMAN, M., kand. tekhn. nauk; TARASOV-AGALAKOV, N., kand. tekhn. nauk

Standardization of evacuation procedures. Pozh. delo 9 no.6: 7-9 Je '63. (MIRA 16:8)

ACC NR: AP6032115 SOURCE CODE: UR/0301/66/012/005/0477/0483

AUTHOR: Roytman, M. I.

ORG: Tashkent Scientific Research Institute for Vaccine and Sera, Ministry of Health SSSR (Tashkentskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok Ministerstva zdravookhraneniya SSSR)

TITLE: The blood coagulation activity of *Vipera Lebetina* Turanica venom and its neutralization by specific antiserum

SOURCE: Voprosy meditsinskoy khimii, v. 12, no. 5, 1966, 477-483

TOPIC TAGS: ~~medicine~~, medical research, snake venom, coagulant, antihermorrhagic, ~~human medicine~~, ~~snake bite~~ poison effect, coagulation, enzyme, antibody, vaccine

ABSTRACT: A new method of evaluating snake venom coagulase activity is presented. The hemocoagulation activity of snake venom is an important factor in the pathogenesis of snake bite injuries, acting within an hour after the bite, and can be counteracted by preliminary doses of heparin. The venom of *vipera Lebetina* is a very powerful hemocoagulant and is used as a thromboplastin substitute in the clinical determination of prothrombin time and as an antihemorrhagic. It has much in common with the proteolytic enzyme papain hastening the formation of fibrin

Card 1/2 UDC: 615.94:598.126-017.715+615.373.39:598.126

ACC NR: AP6032115

from fibrinogen and trypsin which catalyzes the prothrombin-thrombin reaction. The coagulating activity of the venom can be explained by its proteolytic action. In optimum alkaline medium at 37°C, *V. ammodytes* venom destroys the antihemophilic component-accellerin while very high concentrations of this venom form softer clots probably due to its breakdown by proteinases. Antisera prepared from central asiatic snakes had mainly anti-coagulase properties. Until recently, there was no accurate method for evaluating coagulase activity of venoms and anti-coagulase activity of sera and hence no accurate way of determining the antienzyme activities of antibodies. The new method, employing statistical analysis of data for estimating snake venom coagulase and anticoagulase activity in horse sera, is accurate enough to be used for antibody determination during the preparation of snake bite vaccines. In laboratory experiments, *Vipera lebetina* venom coagulated citrated plasma and its action was independent of the calcium content at its optimum pH of 5.5—6.0, but was inhibited by borate ions. Coagulase and anticoagulase fractions of the venom were separated by electrophoresis. Coagulase inhibition by homologous antisera was studied and antipoison effect increased with the purity of the antipoison serum. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 18Jan65/ ORIG REF: 009/ OTH REF: 010/

Card 2/2

L 08975-67

ACC NR: AP6022053 SOURCE CODE: UR/0146/66/009/003/0033/0037

28

AUTHOR: Roytman, M. S.

ORG: Tomsk Order of the Red Banner of Labor Polytechnic Institute (Tomskiy politekhnicheskiy institut)

TITLE: Precision differential indicator of effective values of voltages

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 3, 1966, 33-37

TOPIC TAGS: measuring instrument, electric measuring instrument, differential indicator, comparator, circuit design

ABSTRACT: Errors of differential indicators due to harmonics in the test voltages are analyzed. Indicators based on low-power incandescent lamps and photoresistors have proven to be most sensitive; after 300 hrs of operation (aging), such indicators become highly stable. However, such indicators have a relatively large power consumption. The article suggests the use of high-stability

Card 1/2 UDC: 621.317.326

L 08975-67

ACC NR: AP6022053 O

amplifiers at the indicator input. The best Soviet lamps and photoresistors permit designing differential comparators with a resolution of 0.005% or better. A principal circuit of an electron-tube comparator designed along the above lines is explained. Orig. art. has: 2 figures and 4 formulas.

SUB CODE: 09 / SUBM DATE: 19Mar65 / ORIG REF: 005

ACC NR: AP7002177 SOURCE CODE: UR/0146/66/009/006/0059/0063

AUTHOR: Roytman, M. S.; Tsimbalist, E. I.; Lysov, A. I.

ORG: Tomsk Polytechnic Institute (Tomskiy politekhnicheskiy institut)

TITLE: Photoelectric converter as a control element for electrical circuits

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 6, 1966, 59-63

TOPIC TAGS: photoelectric method, electric device, control circuit

ABSTRACT: The characteristics of a photoelectric converter designed for use in control and measuring circuits are described. The four-terminal converter consists of an SF2-2 photoresistor (output terminal pair) enclosed in a capsule together with an NSM-type low-voltage incandescent lamp which operates at either 6v, 20 mamp, or 9v, 60 mamp (input terminal pair). The converter is characterized by a slight temperature dependence, absence of galvanic coupling between the controlling and the controlled loop, a relatively low time constant, and a high linearity. Some characteristics of the converter are: input impedance, 200—400 and 80 — 170 ohm for 6.3-v, 20-mamp and 9-v, 60-mamp NSM lamps; maximum transfer factor, about 10; temperature instability at an ambient temperature of 1000K is ≤ 0.15%, average photo-emf, 2 μv (for photoresistors illuminated with 9-v, 60-mamp lamps); maximum input power, 20—40 mw. Orig. art. has: 2 figures and 2 formulas. SUB CODE: 09/ SUBM DATE: 10Mar66/ ORIG REF: 005

Card 1/1 UDC: 681.2.083.8 ATD PRESS: 5111

ROYTMAN, M.S.

Separate and independent balancing of a.c. bridges. Izv. TPI 105:190-192 '60. (MIRA 16:8)

(Bridge circuits)

ROYTMAN, M.S.

Overload protection of electric measuring instruments by semiconductor rectifiers. Izv. TPI 105:193-197 '60. (MIRA 16:8)

1. Predstavleno nauchnym seminarom radiotekhnicheskogo fakul'teta Tomskogo ordena Trudovogo Krasnogo Znameni politekhnicheskogo instituta imeni Kirova.
(Electric instruments)
(Electric current rectifiers)

ROYTMAN, Miron Yakovlevich; PCHELINTSEV, V.A., red.; BUIT, V.P., red. izd-va; LELYUKHIN, A.A., tekhn. red.

[Fire-prevention measures in building] Pozharnaia profilaktika v stroitel'nom dele. Izd.2., perer. Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1961. 367 p. (MIRA 15:2)
(Fire prevention) (Building, Fireproof)

GRIGORYAN, Grigoriy Makarovich, prof., doktor tekhn. nauk; YEGOROV, Valerian Nikolayevich, dots., kand. tekhn.nauk; KALASHNIKOV, Konstantin Artamonovich, inzh.-polk.; KOROL'KOVA, Vera Ivanovna, kand. tekhn. nauk; POLOZKOV, Vladimir Tikhonovich, dots., kand. tekhn. nauk; SARKIS'YANTS, Gayk Arkad'yevich, prof. Prinimal uchastiye, SMIRNOV, V.M., inzh.-podpolk.; KUSHELEV, Vladimir Pavlovich, red.; ROYTMAN, Miron Yakovlevich, red.; YEFREMOVA, T.D., ved. red.; KLEYMENOVA, K.F., ved. red.; VOROB'YEVA, L.V., tekhn.red.

[Fundamentals of safety engineering and fire prevention in the petroleum and gas industries] Osnovy tekhniki bezopasnosti i protivopozharnoi tekhniki v neftianoi i gazovoi promyshlennosti. [By] G.M.Grigorian i dr. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1962. 222 p.
(MIRA 15:2)

(Gas industry—Fires and fire prevention)
(Petroleum industry—Fires and fire prevention)
(Industrial hygiene)

ROYTMAN, K., inzh.

Considering fire prevention measures in designing and building boarding schools. Pozh.delo 3 no.10:5 O '57. (MIRA 10:11)
(Boarding schools--Fires and fire prevention)

KALASHNIKOV, Konstantin Artamonovich; ROYTMAN, K.Ya., red.;
FONBERSHTEYN, A.D., red.izd-va; SHLIKHT, A.A., tekhn.red.

[Fireproofing of building materials] Zashchita stroitel'nykh materialov ot vozgoraniia. Moskva, Izd-vo M-va kommun.khoz. RSFSR, 1958. 40 p. (MIRA 12:6)
(Building, Fireproof)

L 18377-65 Pa-4 AMD
ACCESSION NR: AP5003114 S/0063/64/009/003/0319/0324

AUTHOR: Kaner, B. L.; Roytman, K. Ya.

TITLE: Problems of safety in placing equipment in outdoor installations

SOURCE: Vsesoyuznoye khimicheskoye obshcheatvo. Zhurnal, v. 9, no. 3, 1964, 319-324

TOPIC TAGS: sanitation, industrial plant, safety engineering, general construction

Abstract: Fire protection and techniques of safety and industrial sanitation in the design, construction, and operation of exterior type installations are discussed. These problems are pressing because new projects for producing synthetic rubber, etc., practically all specify outdoor equipment with the exception of compressors. The production areas of these plants will consist almost entirely of several exterior installations and small buildings for automatic control and auxiliary production. The danger of fire spreading in exposed installations stems chiefly from such equipment as settling tanks, condensate receivers and storage tanks. The efforts of some designers and plant workers to keep a hand large stocks of the starting materials results from underestimating the fire hazard of compressed gases and readily flammable liquids.

ASSOCIATION: none
SUBMITTED: 00 ENCL: 00 SUB CODE: GO
NO REF SOV: 000 OTHER: 000 JPRS
Card 1/1

MAKSIMOV, Vladimir Fedorovich, dotsent, kandidat tekhnicheskikh nauk; ROYTMAN, K.Ya., retsenzent; SHISHOV, I.A., retsenzent; ROMANENKO, V.A., retsenznet; MALYSHEV, K.N., redaktor; AKHKIPOV, K.N., redaktor; SARMATSKAYA, G.I., redaktor izdatel'stva; SHITS, V.P., tekhnicheskiy redaktor

[Safety engineering and fire prevention in the paper industry] Tekhnika bezopasnosti i protivopozharnaia tekhnika v tsellulozno-bumazhnom proizvodstve. Moskva, Goslesbumizdat, 1956. 242 p. (MLRA 10:2)

(Factories--Fires and fire prevention)
(Paper industry--Safety measures)

ROYTMAN, [illegible]; BERENBAUM, [illegible] (Odessa)

Manufacture of clothing from "pevinol" leather substitute.
Shvein.prom. no.4:19-21 Jl-Ag '64. MIRA 17:10)

SHIRYAYEV, A.F., inzh., red.; ROYTMAN, L.Kh., inzh., red.; DUGINA, N.A., tekhn. red.

[Progressive heat treating techniques] Peredovaia tekhnologiia termicheskoi obrabotki. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 143 p. (MIRA 15:3)

1. Uralvagonzavod, Nizhniy Tail.
(Steel--Heat treatment)
(Furnaces, Heat-treating)

ROYTMAN, L.M.

Tensimanometers. Izm.tekh. no.5:22-24 S-O '57. (MLRA 10:9)
(Manometer) (Pressure gauges)

119-2-11/13

AUTHOR: Roytman, L.M.

TITLE: New Types of Rotameters for the Recording and Control of the Consumption of Liquids and Gases (Novyye tipy rotametrov dlya registratsii i regulirovaniya raskhodov zhidkostey i gazov).

PERIODICAL: Priborostroyeniye, 1958, Nr 2, pp. 28-31 (USSR)

ABSTRACT: A report is given on the following rotameters (the characteristics are given in tables):

a) Rotameter for low pressure: ЭРПР-2, РС-3А, РС-3, РС-5, РС-7.

b) Electronic rotameters:

РЭД-3М
РЭД-А3
РЭД-7М
РЭД-А7
РЭД-С7
РЭД-С9

c) Rotameters: РП-6
РП-25
РП-32

When selecting the various rotameters it is necessary, according to the purpose for which they are intended to be used, to take account of the following points:

Card 1/2

New Types of Rotameters for the Recording and Control of the Consumption of Liquids and Gases 119-2-11/13

1.) Static pressure,
2.) Temperature and aggression capability of the medium to be measured,
3.) Is a long-distance transmission and automatic control necessary?
4.) What degree of measuring accuracy is required ?
5.) What is the permissible drop in pressure ?

There are 5 figures and 4 tables.

AVAILABLE: Library of Congress

Card 2/2 1. Rotameters-Operation 2. Rotameters-Applications 3. Fluid flow-Measurement 4. Fluid flow-Controls

28-6-25/40

AUTHOR: Roytman, L.M.

TITLE: Suggestions for Standardization of Rotameters (Predlozheniya po standartizatsii rotametrov)

PERIODICAL: Standartizatsiya, 1957, # 6, pp 66 - 67 (USSR)

ABSTRACT: There are more than 20 types and more than 100 modifications of liquid meters (rotameters) for measuring consumption of up to 300,000 liters per hour (water) under pressures up to 300 kg/cm^2 at temperatures up to 300°C. Yet there is no standard for such liquid meters. The author suggests a subdivided system and the creation of a separate standard for each category of these meters.

AVAILABLE: Library of Congress

Card 1/1 1. Industry-USSR 2. Rotameters-Standards

ROYTMAN, L.M., inzh.

Gland packing with polyfluoroethylene rings. Vest. mash. 39 no.2:37 F '59. (MIRA 12:3)
(Packing (Mechanical engineering))

ROYTMAN, L.M.

New types of rotary meters used in measuring and regulating the flow of liquids and gases. Proborostroenie no.2:28-31 F '58.
(MIRA 11:2)

(Flowmeters) (Electronic instruments)

119-3-11/14

AUTHOR: Roytman, L. M.

TITLE: **Improvement of a Lever Transmission Mechanism for Mechanical Devices** (Usovershenstvovannyy rychazhnyy umnozhitel'nyy mekhanizm dlya mekhanicheskikh priborov)

PERIODICAL: Priborostroyeniye, 1958, Nr 3, pp. 28-29 (USSR).

ABSTRACT: Lever - transmission - mechanism are used with mechanical devices in order to increase the small movements of elastic elements. The difficulty in the case of the hitherto used transmissions was that the recoil always showed differences with the indication proper.
A new lever mechanism without this inaccuracy was constructed by the Engineering Department for Automation in Oil Industry. The important details and data of measurement are given on a diagram.
There are 3 figures, and 0 references.

AVAILABLE: Library of Congress.

Card 1/1 1. Mechanisms--Applications 2. Transmissions--Revision

SOV/122-59-2-12/34

AUTHOR: Roytman, L.M., Engineer

TITLE: Gland Packing with P.T.F.E.Rings (Sal'nikovyye uplotneniya s kol'tsami iz ftoroplasta)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 2, p 37 (USSR)

ABSTRACT: The use of P.T.F.E. packing rings instead of conventional packings is possible within temperatures ranging from -195 to +250°C. The self-lubricating properties of this material gives coefficients of friction as low as 0.07 to 0.08 without lubrication. A sketch shows standard proportions for "chevron" type packing rings recommended by the Oil Industry Design Bureau. The pressure of the spring loading the chevron rings is determined by the formula $P = 0.13d^2n$ where d is the diameter of the spindle or rod and n is the number of chevron rings. A table is given for the recommended number of packing rings and spring pressure for various rod diameters and gland working pressures. There is 1 figure and 1 table.

Card 1/1

ROYTMAN, L.M., inzh.

Sectional dies for cold upsetting. Vest. mash. 38 no.4:34-35 Ap '58.
(Dies (Metalworking)) (MIRA 11:3)

ROYTMAN, L.M.

122-1-8/34

AUTHOR: Roytman, L.M., Engineer.

TITLE: Electro-plated coatings. Designer's and production engineer's reference sheets. (Gal'vanicheskiye pokrytiya. Listki dlya konstruktora k tekhnologa)

PERIODICAL: "Vestnik Mashinostroyeniya" (Engineering Journal), 1957, No.1, pp. 31 - 34 (U.S.S.R.)

ABSTRACT: Information based in part on the standard specifications ГОСТ 2249-43 and ГОСТ 3002-45 is reviewed. The common coatings used in engineering are listed with their main properties and fields of application. Particular attention is given to fits and allowances in connection with costing thicknesses.

Card 1/1 There are 2 figures and 6 tables.

AVAILABLE: Library of Congress

ROYTMAN, L.M.

Improved lever amplifying mechanism used in mechanical instruments. (MIRA 11:4)
Priborostroenie no.3:28-29 Mr '58.
(Measuring instruments)

ROYTMAN, L. M.

3
1-7E4

V 2051. MEASUREMENT AND REGULATION OF SMALL FLOWS OF LIQUIDS AND GASES WITH ROTAMETERS WITH MAGNETIC TRANSMISSION. Belozerskii, S.S. and Roitman, L.M. (Priborostroenie (Instrum. Making, U.S.S.R.), 1956, (12), 9-11; ebstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1957, (12), 43500). A rotameter designed for the oil industry, with a magnetic following system and pneumatic transmission, is described.

SRP

ROYTMAN, L.M.

ROYTMAN, L.M., inzh.

Suggested standards for flowrators. Standartizatsiia no.6:66-67 N-D '57. (MIRA 10:12)
(Flowmeters--Standards)

AUTHOR: Roytman, L.M. 115-5-11/44

TITLE: Tension Manometers (Tenzomanometry)

PERIODICAL: "Izmeritel'naya Tekhnika", No 5, Sep-Oct 1957, pp 22-24 (USSR)

ABSTRACT: The Designing Bureau for Automation of Oil Refineries has developed tension manometers ("tensomanometr") and differential tension manometers ("tensodifmanometr") provided with wire resistance-indicators, for measuring and controlling pressures in various technological devices. The article gives a detailed description of the design of tension manometers for 100, 300, and 700 kg/cm^2, comprising different numbers of wire indicators (for various degrees of accuracy), and differential manometers for the same range of static pressures and pressure drops of 5-20-40-80 kg/cm^2. General principles of designing and choosing materials for resilient instrument parts for work in corrosive medium and under varying load are discussed. Welding of these instruments is not recommended as well as galvanizing with copper, nickel and chromium, as such coating reduces corrosion-fatigue resistance. Steel grades suitable for work conditions concerned are recommended.
The article contains 3 drawings and 1 diagram.

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Card 1/1

ROYTMAN, L.M., inzhener.

Elektroplating. Vest.mash.37 no.1:31-34 Ja '57. (MLRA 10:2)
(Electroplating)

BELOZERSKIY, S.S., ROYTMAN, L.M.

Using rotometers with magnetic transmissions for measuring and regulating minor consumption of fluids and gases. Priborostroenie no.12:9-11 D '56. (MLRA 10:1)
(Flowmeters) (Magnetic instruments)

ROYTMAN, M., kand.tekhn.nauk, dots.

Specific heat of fires and fire load. Pozh.delo 6 no.12:8 D '60. (MIRA 13:12)

(Building, Fireproof)

ROYTMAN, M., kand.tekhn.nauk; ZENKOV, N., inzh.

Testing of silica bricks. Pozh.delo 5 no.12:14-15 D '59.
(MIRA 13:4)

(Bricks--Testing)

ROYTMAN, M.Ya.; TURKOV, A.S.; SKITEV, N.T.; PIVOVAROV, A.S.

Some problems of fire prevention in the enterprises of chemical industries. Pozh. bezop. no.4:4-23 '65. (MIRA 19:1)

ACC NR: AP6032115 SOURCE CODE: UR/0301/66/012/005/0477/0483

AUTHOR: Roytman, M. I.

ORG: Tashkent Scientific Research Institute for Vaccine and Sera, Ministry of Health SSSR (Tashkentskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok Ministerstva zdravookhraneniya SSSR)

TITLE: The blood coagulation activity of *Vipera Lebetina* Turanica venom and its neutralization by specific antiserum

SOURCE: Voprosy meditsinskoy khimii, v. 12, no. 5, 1966, 477-483

TOPIC TAGS: ~~medicine~~, medical research, snake venom, coagulant, antihermorrhagic, ~~immunochemistry~~, ~~antivenin~~ poison effect, coagulation, enzyme, antibody, vaccine

ABSTRACT: A new method of evaluating snake venom coagulase activity is presented. The hemocoagulation activity of snake venom is an important factor in the pathogenesis of snake bite injuries, acting within an hour after the bite, and can be counteracted by preliminary doses of heparin. The venom of *vipera Lebetina* is a very powerful hemocoagulant and is used as a thromboplastin substitute in the clinical determination of prothrombin time and as an antihemorrhagic. It has much in common with the proteolytic enzyme papain hastening the formation of fibrin

Card 1/2 UDC: 615.94:598.126-017.715+615.373.39:598.126

ACC NR: AP6032115

from fibrinogen and trypsin which catalyzes the prothrombin-thrombin reaction. The coagulating activity of the venom can be explained by its proteolytic action. In optimum alkaline medium at 37°C, *V. ammodytes* venom destroys the antihemophilic component-accellerin while very high concentrations of this venom form softer clots probably due to its breakdown by proteinases. Antisera prepared from central asiatic snakes had mainly anti-coagulase properties. Until recently, there was no accurate method for evaluating coagulase activity of venoms and anti-coagulase activity of sera and hence no accurate way of determining the antienzyme activities of antibodies. The new method, employing statistical analysis of data for estimating snake venom coagulase and anticoagulase activity in horse sera, is accurate enough to be used for antibody determination during the preparation of snake bite vaccines. In laboratory experiments, *Vipera lebetina* venom coagulated citrated plasma and its action was independent of the calcium content at its optimum pH of 5.5—6.0, but was inhibited by borate ions. Coagulase and anticoagulase fractions of the venom were separated by electrophoresis. Coagulase inhibition by homologous antisera was studied and antipoison effect increased with the purity of the antipoison serum. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: [illegible]/ ORIG REF: [illegible]/ OTH REF: 010/

Card 2/2

ROYTMAN, M.I.

Prophylactic properties of antivenom sera in respect to the venoms of snakes of Central Asia. Zhur. mikrobiol., epid. i immun. 42 no.11:108-111 N '65. (MIRA 18:12)

1. Tashkentskiy institut vaktsin i syvorotok. Submitted Nov. 16, 1964.

ROYTMAN, M.P. (Moskva)

Fortieth anniversary of the establishment of night sanatoria in the U.S.S.R. Sov. zdrav. 21 no.1:52-56 '62. (MIRA 15:2)

1. Iz Instituta organizatsii zdravookhraneniya i istorii meditsiny imeni N.A.Semashko.
(HOSPITALS--OUTPATIENT SERVICES)

L 41796-65 EWT(1)/EED-2/EWA(h) Pm-4/Peb S/0274/64/000/003/A018/A018

ACCESSION NR: AR4039100

22
B

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 3A91

AUTHOR: Olomutskiy, L. P. ; Roytman, M. S.

25

TITLE: Reducing the phase shift of a phase-detector transformer

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 116, 1962, 27-29

TOPIC TAGS: phase detector, lf transformer

TRANSLATION: L-f transformers are nonlinear elements because their primary inductance and loss resistance depend on the supply voltage. The transformer phase shift also varies with the voltage which is inadmissible in many cases. The transformer nonlinearity results in a dynamic (relative) phase shift which depends on the transformer input voltage. It is shown that the relative phase shift can be reduced either by a reasonable choice of transformer parameters or by introduction of a negative feedback. Effect of the transformer input voltage on the relative phase shift was determined with and without a series voltage feedback $1 + K\beta = 10$. The curves show that good results can be obtained from a slight complication of the

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ACCESSION NR: AR4039100

circuit. Simultaneously the zero-point shift of the synchronous detector diminishes thanks to the reduction of the internal impedance of the source. Two illustrations. Bibliography: 1 title.

SUB CODE: EC ENCL: 00

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Card 2/2

L 59557-65 EWT(1)/EWA(h) Pn-4/Peb

ACCESSION NR: AP5013851 UR/0103/65/026/005/0934/0937
621.376.93

AUTHOR: Roytman, M. S. (Tomsk)

TITLE: Adjustable-selectivity junction-transistor synchronous detector

SOURCE: Avtomatika i telemekhanika, v. 26, no. 5, 1965, 934-937

TOPIC TAGS: synchronous detector, selective synchronous detector

ABSTRACT: To eliminate an odd harmonic, a voltage-wave shaper inserted into the detector voltage-switching circuit is proposed. The sinusoidal switching voltage is applied to transformer 1, see Fig. 1 of the Enclosure. The voltage from one of its secondaries is rectified, filtered, and used as bias for transistors T_1 and T_2. As both switching and bias voltages are supplied by the same source, the turn-on and turn-off angles can be positively controlled. The relative instability of the rectified voltage is 0.5% or less at a turn-on angle of 30°. However, the above circuit has an intrinsically lower noise immunity. A two-switching-transformer circuit is suggested to improve this characteristic. Orig. art. has: 6 figures and 3 formulas.

ASSOCIATION: none

SUBMITTED: 08Jul64 ENCL: 01 SUB CODE: EC

NO REF SOV: 002 OTHER: 001

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