Calculation of Point-source Blast (Cont.)

$$\frac{\partial \varphi}{\partial \tau} + \mu \frac{\partial \varphi}{\partial \sigma} + \lambda + \nu' \frac{\partial \Theta}{\partial \sigma} = 0$$

$$\frac{\partial \psi}{\partial \tau} - \mu \frac{\partial \psi}{\partial \sigma} + \lambda + \nu' \frac{\partial \Theta}{\partial \sigma} = 0 \qquad (2)$$

$$\frac{\partial \xi}{\partial \sigma} = \frac{\sigma^2 \Theta^2}{\xi^2} \left[\frac{\gamma - 1}{4\sqrt{\gamma}} (\varphi + \psi) \right]^{\frac{2}{1-\gamma}}$$

$$\frac{\partial \Theta}{\partial \tau} = 0$$

where λ , μ , ν' are known functions of Θ , φ , ψ , ξ , σ . The basic functions to be determined are now φ , ψ , Θ , ξ , To solve the problem, the boundary conditions are set at the origin and front of the blast wave in the form of the equations:

$$\varphi = \psi$$

$$\varphi - \psi = \frac{4}{\gamma + 1} \frac{c^2 - \gamma}{c \varphi} \qquad (3)$$

$$\Theta = \left(\frac{2}{\gamma+1} \right)^{\frac{1}{2\gamma}} \left(\frac{\gamma - 1}{\gamma + 1} \right)^{\frac{1}{2}} \left(c^2 - \frac{\gamma - 1}{2} \right)^{\frac{1}{2\gamma}} \left(1 + \frac{2\gamma}{(\gamma - 1) c^2} \right)^{\frac{1}{2}} ;$$

$$\frac{\gamma - 1}{4\sqrt{\gamma}} (\varphi + \psi)^{\frac{2\gamma}{\gamma - 1}} = \frac{2}{\gamma + 1} \left(c^2 - \frac{\gamma - 1}{2} \right) ;$$

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Calculation of Point-source Blast (Cont.)

Where C is the velocity of the blast wave. To integrate system (2) at the given boundary conditions, as initial conditions are used the solution of the automodel problem (for $\tau=\tau_0$, where t is sufficiently small) obtained by L.I. Sedov [Ref. 1]. Before integrating system (2), the behavior of unknown functions in the neighborhood of the blast origin ($\sigma \to 0$) is investigated. Considering the order of change of unknown functions in the neighborhood of the blast origin and conditions on the outer boundary of certain intervals close to the origin, asymptotic formulas are derived by which it is possible to calculate the values of functions in the central interval using the values of functions on the outer boundary. Section three deals with the numerical solution of the system of partial differential equations (2) by the method of finite differences. The computational net is constructed taking $\sigma =$ constant, $\tau =$ constant, and a mesh size $\Delta\tau = \frac{\Delta\sigma}{C}$. Such a mesh size selection is convenient, because the wave always will pass through the lattice point of a calculation net. The system of differential equations (2) is reduced to a system of difference equations by subsitituting for partial derivatives the finite differences according to the scheme.

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Calculation of Point-source Blast (Cont.)

$$\frac{\partial \varphi}{\partial \sigma} = \frac{\frac{\varphi_{i+1}^{n} + \varphi_{i+1}^{n+1}}{2} - \frac{\varphi_i^{n} + \varphi_i^{n+1}}{2}}{\Delta \sigma_{i,i+1}}$$

$$\frac{\partial \varphi}{\partial \tau} = \frac{\frac{\varphi_i^{n+1} + \varphi_{i+1}^{n+1}}{2} - \frac{\varphi_i^{n} + \varphi_{i+1}^{n}}{2}}{\Delta \tau}$$

Where n is the number of the curve τ = const. and i is the number of the point σ_i on it. The computational procedure for the unknown functions φ, ψ, θ in the lattice points of the computational net is established. For the calculation of unknown functions on the blast wave a special method is presented. More detailed analysis is given of the calculation of functions in the central interval, where asymptotic formulas were applied. The size of the computational net is increased after the blast wave gets further away from the blast center. On the basis of the calculated values of $\varphi, \psi, \theta, \xi$ hydrodynamic parmeters p, ρ, u are established. Three criteria are presented concerning the control of the accuracy of the calculations, two of which (control based on the coincidence of Lagrange and Euler coordinates on the shock wave and control with respect to the energy based on the energy conservation law) are more applicable. The selection of the central interval, on which the accuracy of the

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Calculation of Point-source Blast (Cont.)

calculation depends, is based on the most satisfactory fulfillment of all criteria. In section four the results are presented in the form of graphs and tables. Calculations were carried out for $\gamma = 1.4$; $E = 8.54 \times 10^{12}$ kgm; $p_0 = 10321$ kg/m^2; $\rho_0 = .125$ kg·sec^2/m^4

Calculations were started from the model solution with the following values:

$\tau_0 = .00037119$ ($t = .001280$ sec)

$\xi = .042448$ ($r = 42.05$ m)

$\bar{p} = \frac{p}{p_0} = 1743.3$ ($p = 1799$ atm. abs)

The calculations were carried out in two stages. In the first stage, 16 calculation intervals were taken. The initial mesh size was $\sigma = .0026530$. Calculations were carried out to

$\tau = 5.0946$ ($t = 17.56$ sec); $\xi = 6.7077$ ($r = 66.45$ m); $\bar{p} = \frac{p}{p_0} = 1.0314$ ($p = 1.064$ atm.

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Calculations of Point-source Blast (Cont.)

In the second stage 46 calculation intervals were taken. The initial mesh size was taken $\sigma = .0008162\gamma$. Calculations were carried out to $\tau = 17.829$ ($t = 61.47$ sec); $\xi = 21.866$ ($r = 21660$ m); $p = \frac{P}{P_0} = 1.0078$ ($p = 1.040$ atm. abs) The results of the second stage are represented in 23 graphs and 9 tables. The authors express their gratitude to M.V. Keldysh for his scientific supervision of the present study. They also thank their coworkers of the Mathematics Institute, K.I. Babenko and V.V. Rusanov, for their help in the investigation of the stability of computing schemes and the selection of a new wave-computing version. The authors also thank laboratory workers T.A. Loboda, Yu. S. Userdova, Ye. I. Dolgova and N.P. Baranova for their calculations on the high speed electronic computer of the Academy of Sciences of the U.S.S.R. and for processing computational results in the form of graphs and tables. There are 7 references, of which 2 are Soviet and 5 English.

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Calculations of Point-source Blast (Cont.)

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Calculation of Point-source Blast (Cont.)

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D/299/D303

AUTHORS: Okhotsimskiy, D.Ye., and Vlasova, Z.P. (Moscow)

TITLE: On the behavior of shock waves at a large distance from the explosion

PERIODICAL: Zhurnal vyc islitel'noy matematiki i matematicheskoy fiziki, v. 2, no. 1, 1962, 107 - 124

TEXT: A numerical calculation is carried out of spherical shock-wave propagation. The present investigation is a continuation of D.Ye. Okhotsimskiy, I.L. Kondrasheva, Z.P. Vlasova and R.K. Kazakova (Ref. 1: Raschet totchechnogo vzryva s uchetom protivodavleniya. Tr. Matem. in-ta AS SSSR, 1957, 50). As initial data, a distribution of gasdynamic parameters was taken, corresponding to a pressure gradient at the shock front equal to 1.1079. The computation grid covered only the region of disturbed flow immediately behind the shock front; the other part of the gas behind the shock was considered as undisturbed. In order to make allowance for the values of the hydrodynamic variables at the late stages of shock development, correction terms were added. A 48-point scheme was used;

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thereby the computations were carried through to a pressure gradient equal to 1.0018. The computations were further continued by means of S.A. Khristianovich's approximate method (Ref. 2: Udarnaya volna na znachitel'nom rasstoyanii ot mesta vzryva. Prikl. matem.i mekhan., 1956, 20, no. 5, 599-605). In addition, results are given relating to the formation of the second shock wave in the negative-phase region. Denoting by p, u, ρ, D and ξ_B the pressure, particle velocity, density, shock velocity and coordinate of the shock front, one obtains (after transformations), the system

$$\frac{\partial \tilde{u}}{\partial \tau} + b\frac{\partial \tilde{u}}{\partial \eta} + g\frac{\partial \tilde{p}}{\partial \eta} + d = 0, \qquad (2.17)$$

$$\frac{\partial \tilde{p}}{\partial \tau} + b\frac{\partial \tilde{p}}{\partial \eta} + e\frac{\partial \tilde{u}}{\partial \eta} + f = 0, \qquad (2.18)$$

$$\frac{\partial \tilde{\rho}}{\partial \tau} + b\frac{\partial \tilde{\rho}}{\partial \eta} + c\frac{\partial \tilde{u}}{\partial \eta} + h = 0, \qquad (2.19)$$

$$b = \frac{u - \eta D}{\xi_B + \lambda}, \quad c = \frac{\rho}{\xi_B + \lambda}, \quad d = -\frac{D\tilde{u}}{\xi_B}, \quad e = \frac{\gamma p}{\xi_B + \lambda}, \qquad (2.20)$$

$$g = \frac{1}{\rho(\xi_B + \lambda)}, \quad f = \frac{2\gamma p\tilde{u}}{\xi} - \frac{\tilde{p}D}{\xi_B}, \quad h = \frac{2\tilde{\rho}u}{\xi} - \frac{\tilde{\rho}D}{\xi_B}.$$

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The problem amounts to the integration of system (2.17)-(2.19) under the following boundary conditions: At the shock front

$$u = \frac{2}{\gamma+1}\left(D - \frac{\gamma}{D}\right), \qquad (2.21)$$

$$\rho = \frac{\gamma+1}{\gamma-1}\left[1 + \frac{2\gamma}{(\gamma-1)D^2}\right]^{-1},$$

$$p = \frac{2}{\gamma+1}\left(D^2 - \frac{\gamma-1}{2}\right).$$

and at the left boundary

$$u = 0. \qquad (2.22)$$

System (2.17)-(2.19) was integrated by means of a second-order difference scheme. The partial derivatives were written in the form

$$\frac{\partial f}{\partial \tau} = \frac{f_{i+1}^{n+1} + f_i^{n+1} - f_{i+1}^n - f_i^n}{2(\tau^{n+1} - \tau^n)}, \qquad (3.1)$$

$$\frac{\partial f}{\partial \eta} = \frac{f_{i+1}^{n+1} - f_i^{n+1} + (1-m)(f_{i+1}^n - f_i^n)}{\eta_{i+1} - \eta_i}, \quad \frac{1}{2} \leqslant m < 1. \qquad (3.2)$$

Replacing in Eqs. (2.17)-(2.19) the partial derivatives by finite

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differences, one obtains

$$\alpha_{i+1/2}^{n+1/2}\tilde{u}_{i+1}^{n+1}+\beta_{i+1/2}^{n+1/2}\tilde{u}_{i}^{n+1}+mg_{i+1/2}^{n+1/2}(\tilde{p}_{i+1}^{n+1}-\tilde{p}_{i}^{n+1})=A, \quad (3.3)$$

$$\alpha_{i+1/2}^{n+1/2}\tilde{p}_{i+1}^{n+1}+\beta_{i+1/2}^{n+1/2}\tilde{p}_{i}^{n+1}+me_{i+1/2}^{n+1/2}(\tilde{u}_{i+1}^{n+1}-\tilde{u}_{i}^{n+1})=B, \quad (3.4)$$

$$\alpha_{i+1/2}^{n+1/2}\tilde{\rho}_{i+1}^{n+1}+\beta_{i+1/2}^{n+1/2}\tilde{\rho}_{i}^{n+1}+mc_{i+1/2}^{n+1/2}(\tilde{u}_{i+1}^{n+1}-\tilde{u}_{i}^{n+1})=F. \quad (3.5)$$

The system of difference equations (3.3)-(3.5) was solved by the "well-shaft" method (developed by I.M. Gel'fand and O.V. Lokutsiyevskiy). Thereupon, S.A. Khristianovich's approximate method is used, involving the integral of the equations of motion of a spherical shock-wave, viz.:

$$\delta=\frac{\gamma+1}{2}M\ln\frac{\tau}{\tau_0}+\frac{\tau_0}{\tau}\delta_0\left[M\frac{\tau}{\tau_0}\right], \quad (4.1)$$

where

$$M=\frac{1}{\sqrt{\tau}}u, \quad \delta=\frac{1}{\sqrt{\tau}}\frac{\xi}{\tau}-1; \quad (4.2)$$

With low pressures, one can pass from the numerical calculation (by the "well-shaft" method) of the wave form to calculation by formula (4.1). The distribution of the excess pressure was calculated by

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the approximate formula

$$\Delta p = \sqrt{\gamma}\, u_0 \qquad (4.4)$$

Further, the results of calculations are given in figures and tables. The value of m in formula (3.2) was set m = 1/2. The initial time-step was $\Delta\tau = 0.2117988$ (0.7302 sec.). The numerical calculation was carried out to the moment $\tau = 65.234$ (223.90 sec.); it could not be carried out beyond that as the smoothness of the solution was impaired. The calculations by the approximate method were started a little earlier (at $\tau = 58.457$). The results, at $\tau = 65.234$, coincided for both the numerical and approximate methods. The approximate method was used for calculating the velocity distribution u, the radius of the shock front and the pressure and velocity immediately behind the front. From a figure, the tendency to profile reversal and shock-wave formation in the negative phase region, is evident. The tables show the position of the shock front, the values of the parameters immediately behind the shock front, as a function of time, the distribution of the excess pressure, particle velocity and density; the magnitudes of the areas of the positive and negative phases are also listed in a table. There are 2

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figures, 6 tables and 4 Soviet-bloc referen...

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VLASOVA, Z.P.

OKHOTSIMSKIY, D.Ye.; KONDRASHEVA, I.L.; VLASOVA, Z.P.; KAZAKOVA, R.K.; PETROVSKIY, I.G., akademik, otvetstvennyy redaktor; NIKOL'SKIY, S.M., professor redaktor; GUROV, K.P., redaktor; VANYUSHENKOVA, V.V., tekhnicheskiy redaktor; MAKUNI, Ye.V., tekhnicheskiy redaktor.

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(Shock waves)

SOV/124-58-3-2659

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 16 (USSR)

AUTHORS: Okhotsimskiy, D. Ye., Kondrasheva, I. L., Vlasova, Z. P., Kazakova, R. K.

TITLE: Calculation of Point Detonation With Counter-pressure (Raschet tochechnogo vzryva s uchetom protivodavleniya)

PERIODICAL: Tr. Matem. in-ta AN SSSR, 1957 Vol 50, 66 pp, ill.

ABSTRACT: The author gives the results of the solution of a problem concerning point detonation in a motionless medium where the constant values of the initial density and pressure are ρ_0 and p_0, respectively. Taken as initial equations are the equations of one-dimensional, unsteady, adiabatic motion of a perfect ideal gas with Lagrangian independent variables and specially selected unknown functions. The problem is solved by the network method with some changes and additions. The distribution of the functions sought, at a certain moment of time sufficiently close to the detonation, as obtained from L.I. Sedov's solution of a self-similar problem concerning a detonation without taking into account the counter-pressure, is used to provide the initial known quantities. The paper presents an account of

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Calculation of Point Detonation With Counter-pressure

one of the possibilities employed in the calculation, in which the intervals on the coordinate $\Delta\sigma$ remain constant, while the time spacing $\Delta\tau$ is selected from the condition $\Delta\tau = \Delta\sigma / c$ (c being the velocity of the shock wave at the moment of time under consideration). After the number of intervals was doubled, the intervals were also doubled in size. At the center of the detonation, in view of the singularity thereof, asymptotic formulae describing the behavior of the functions sought were employed. The magnitude of the central interval was taken from the condition of a smooth fairing with the asymptotic curve. The smoothness of the fairing was controlled. Calculations are made for the exponent of the adiabat $\gamma = 1.4$. In two stages, the calculations are brought up to the moment of time $t = 61.47$ sec (corresponding to the dimensional variables at the liberation of the initial energy $E_o = 8.54 \times 10^{12}$ kgm, $\rho_o = 0.125$ kg. $\sec^2/m^4$, $p_o = 10,321$ kg/m^2) with a shock-wave radius $r = 21666$ m and a shock-wave pressure $p = 1.040$ atm. Detailed tables and graphs are presented. Comments are made upon the peculiar nature of the changing characteristics of the motion of the gas with the passage of time. A satisfactory coincidence is noted of the calculation results with the self-similar solution at the early stage of the detonation and the extremely slow deformation of the shock wave profile during its deterioration. Parallel solutions of the same problem were achieved by different methods by Goldstine and Neumann

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Calculation of Point Detonation With Counter-pressure

(Goldstine, H., Neumann, J., Communs. Pure and Appl. Math., 1955, Vol 8, pp 327-354) and Brode (Brode, H., Appl. Phys., 1955, Vol 26, Nr 6, pp 766-775 - RZhMekh., 1956, Nr 9, abstract 5794). It is indicated that the comparison of the results obtained with the results of the first of these papers shows a satisfactory coincidence, but that a smaller number of computation points along the coordinate and the time was required in the paper here reviewed.

M. L. Lidov

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KITAYEV, Yevgeniy Vasil'yevich, prof., doktor tekhn.nauk, zasluzhennyy deyatel' nauki i tekhniki [deceased]; GREVTSEV, Nikolay Fedorovich, dotsent, kand.tekhn.nauk; MEYERSON, I.G., dotsent, kand.tekhn.nauk, nauchnyy red.; VLASOVA, Z.I., red.; KOROVENKO, Yu.N., tekhn.red.

[General course in electrical engineering] Kurs obshchei elektrotekhniki. Izd.5., perer. i dop. Leningrad, Gos.soiuznoe izd-vo sudostroit. promyshl., 1960. 709 p. (MIRA 14:4)

(Electric engineering)

BRUK, Moisey Abramovich; RIKHTER, Andrey Aleksandrovich; GOL'TRAF, I.S., kand.tekhn.nauk, retsenzent; ZAKHARENKO, B.A., kand.tekhn.nauk, retsenzent; SULOYEV, A.V., nauchnyy red.; VLASOVA, Z.V., red.; CHISTYAKOVA, R.K., tekhn. red.

[Operating conditions of marine diesel engines] Rezhimy raboty sudovykh dizelei. Leningrad, Sudpromgiz, 1963. 483 p. (MIRA 16:6)

(Marine diesel engines)

PETROV, Vladilen Nikolayevich; ABRAMOVICH, V.R., inzh., retsenzent; ISKOZ, B.B., inzh., retsenzent; PETROV, G.L., nauchn. red.; VLASOVA, Z.V., red.

[Welding and cutting of stainless steel] Svarka i rezka nerzhaveiushchikh stalei. Leningrad, Sudostroenie, 1965. 202 p. (MIRA 18:3)

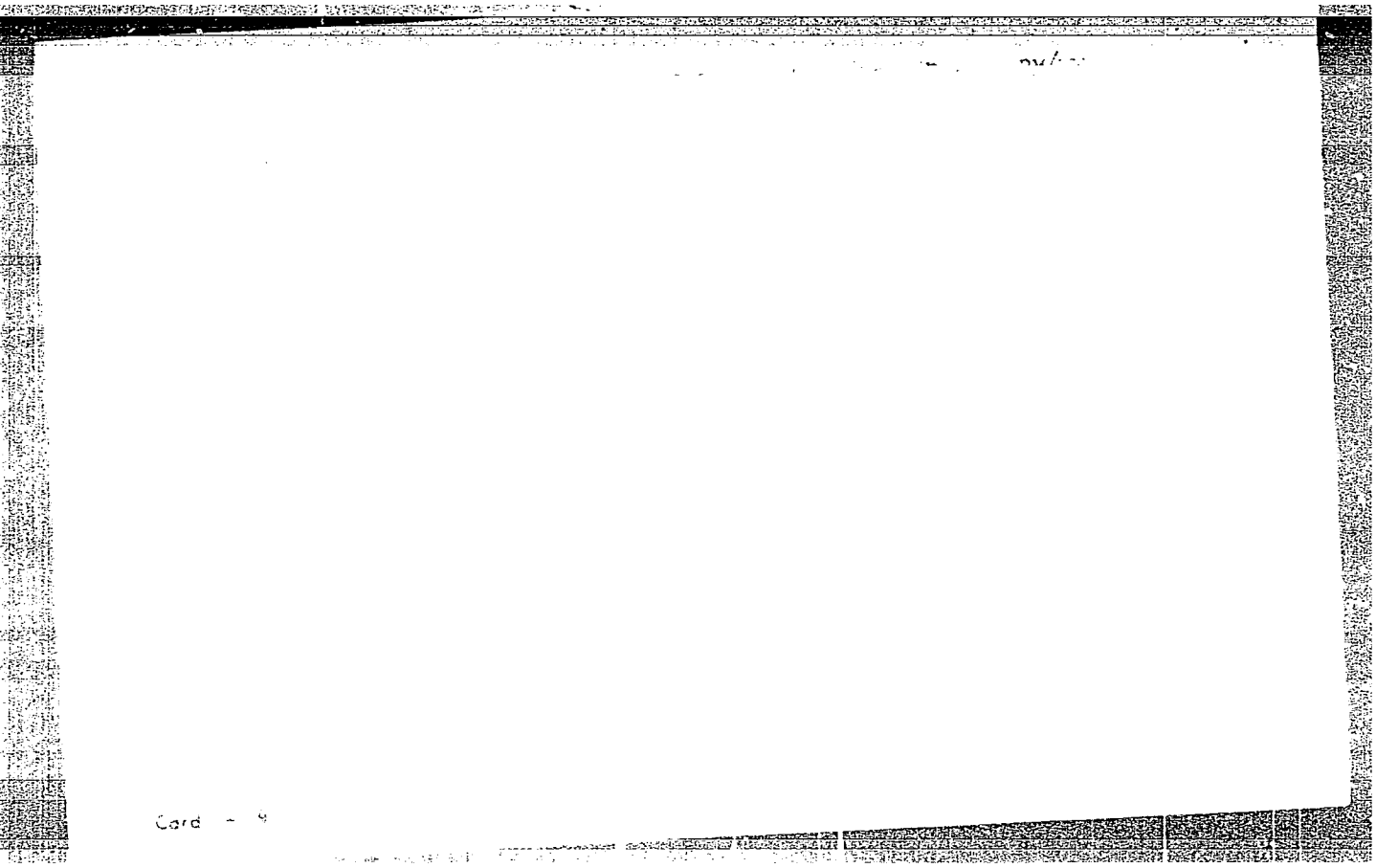
BEK, V.I.; KARDASHOV, D.A.; VLASOVA-GOLOVATAYA, V.I.; Prinimali uchastiye: MARKINA, O.A.; ZNAMENSKAYA, M.I.; VOZDVIZHENSKAYA, L.A.

Heat-resistant VK-4 elastic adhesive. Plast.massy no.4:23-25 '64. (MIRA 17:4)

SAMOV, Vitaliy Aleksandrovich; BOTKIN, Petr Petrovich; KHANDOV, Z.A., prof., doktor tekhn. nauk, retsenzent; ANDREYEV, P.F., kand. khim. nauk, retsenzent; ZAKHARENKO, B.A., kand.tekhn.nauk, nauchnyy red.; VLASOVA, Z.V., red.; KRYAKOVA, D.M., tekhn.red.

[Fuel for diesel transportation engines]Toplivo dlia transportnykh dizelei. Leningrad, Sudpromgiz, 1963. 355 p. (MIRA 16:4)

(Diesel fuels)



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ACCESSION NR: AP4028546

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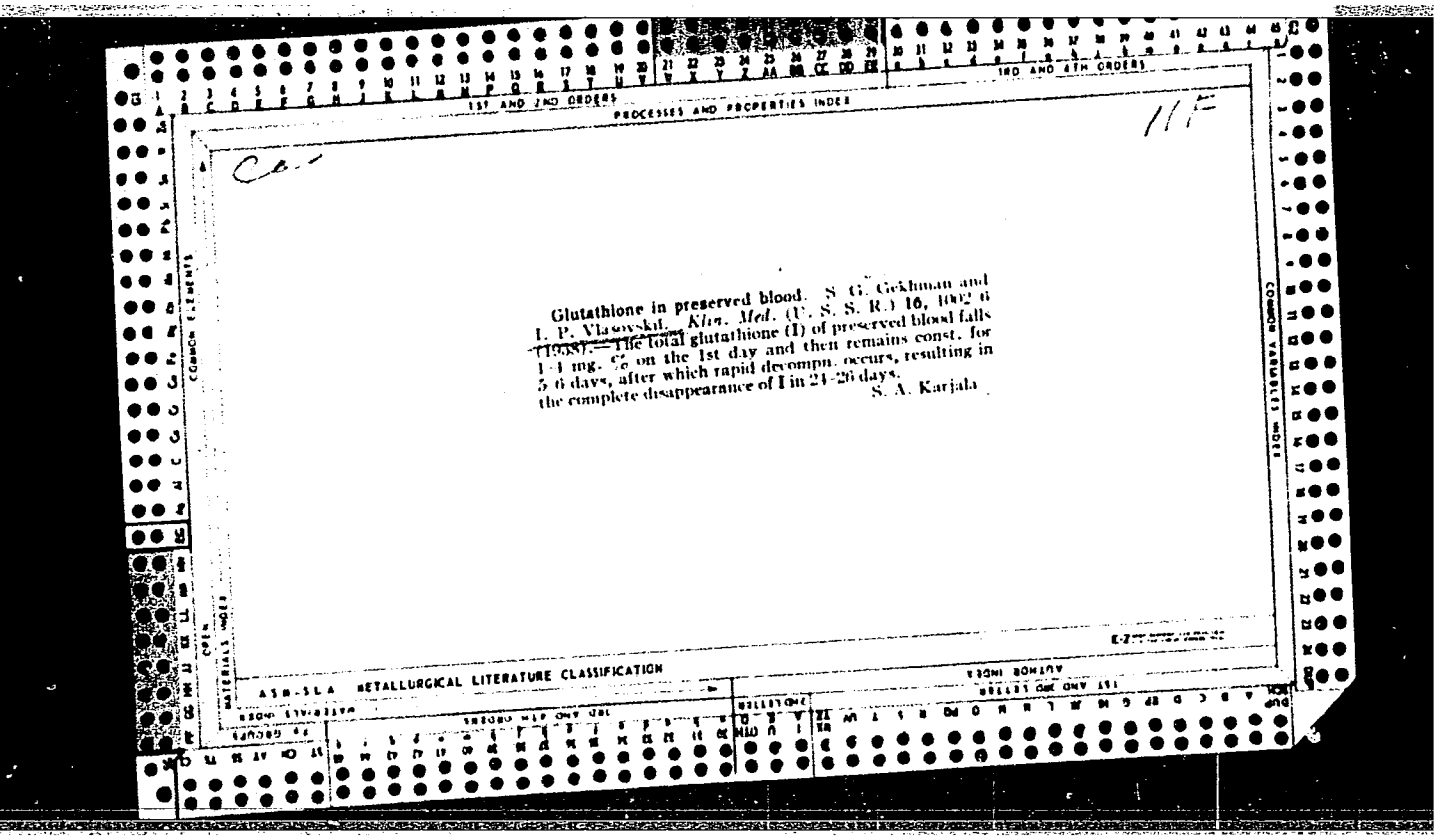
[illegible] figures.



Glutathione in preserved blood. S. G. Gekhman and I. P. Vlasovskii. *Klin. Med.* (U. S. S. R.) **16**, 1002-6 (1938).—The total glutathione (I) of preserved blood falls 1-1 mg. cc on the 1st day and then remains const. for 5-6 days, after which rapid decompn. occurs, resulting in the complete disappearance of I in 24-26 days.
S. A. Karjala

14(5) SOV/132-59-6-11/16

AUTHOR: Vlasovskiy, A.N.

TITLE: From the Experience of Equipping the Bore-Holes with Filters Without a Column of Auxiliary Drive-Pipes

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 6, p 56 (USSR)

ABSTRACT: Bore-holes for the observation of water bearing levels in alluvial loose deposits are usually drilled by the percussion drilling method. The author describes how specially-constructed filters fitted in such 40 - 60 m deep bore holes permit drilling with a UK B2-100 drilling rig without drive-pipes. There is 1 diagram.

ASSOCIATION: Trest Luganskuglegeologiya (The Luganskuglegeologiya Trust)

Card 1/1

VLASOVSKIY, G. P.

USSR/Medicine - Blood Transfusion Jan 51

"Transfusion of Oxygenated Blood," Prof A. L. Fisanovich, G. P. Vlasovskiy, Faculty Med Clinic, Stanislav Med Inst

"Klin Med" Vol XXIX, No 1, pp 64-67

Nikitin ("Vest Khirurgii", 1, 1947) applied in shock intraarterial transfusions of preserved blood to which perhydrol (0.5-0.7 cc per 250 cc of blood) had been added. Authors successfully used blood containing perhydrol and adrenalin. Upon addn of perhydrol the osmotic resistance of erythrocytes is

186T75

USSR/Medicine - Blood Transfusion (Contd) Jan 51

raised and keeping quality of the blood increased thereby. Injection of this blood raises the cardiovascular tonus by stimulating the vegetative nervous system. After its transfusion, the blood pressure is increased.

186T75

Vlasovskyy, G. P. Nov 52

USSR/Medicine - Blood Transfusion

"Colloidal Stability of Plasma in Traumatic Sepsis and Its Importance in the Indications for a Blood Transfusion," G. P. Vlasovskyy, Cand Med Sci

Khirurgiya, No 11, pp 47-55

Discusses his observations of a loss in the electrocolloidal stability of proteins in the blood plasma of cases where sepsis had set in following traumatic or gunshop injuries. Advocates the transfusion of blood in small doses at intervals of 4-5 days, after a preliminary detn of the colloidal stability of the recipient's blood in order to avoid severe reaction. This detn may be carried out by the Goldenberg-Ostroumova method (described in text), or by a nephelometer which, in the author's words, may be "easily constructed in any medicat institution."

265 T 25

VLASOVSKIY, G.P.

VLASOVSKIY, G.P., kandidat meditsinskikh nauk

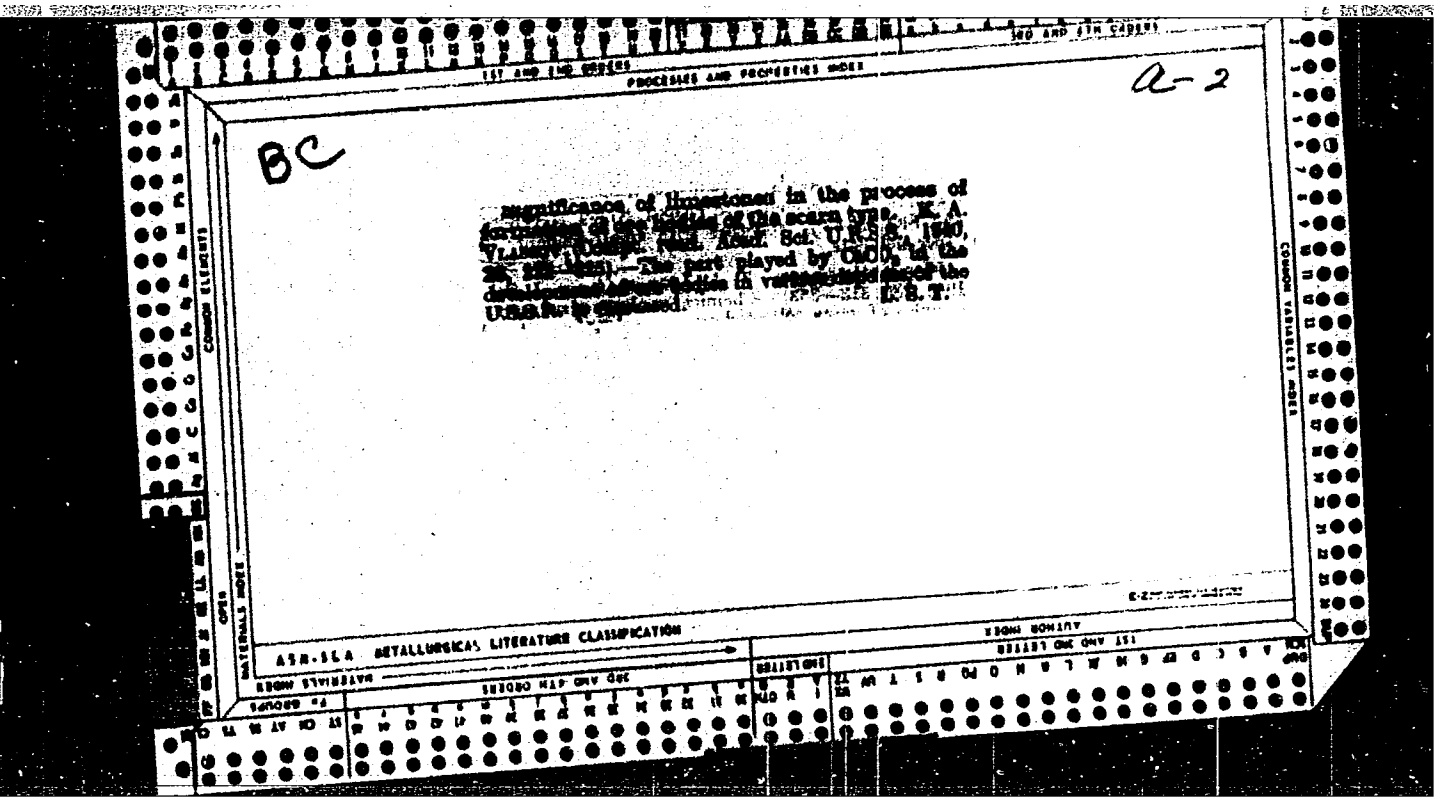
Treating burns in district hospitals. Nov.khir.arkh. no.3:65-67 My-Je '57. (MLRA 10:8)

1. Glavnyy khirurg Belogorodskogo oblastnogo otdela zdravo-okhraneniya
(BURNS AND SCALDS)

KOZLOV, Konstantin Yakovlevich; VLASOVSKIY, V.A., red.; FREGER, D.P., red.izd-va; GVIRTS, V.L., tekhn. red.

[Ways to improve labor productivity in the assembly of reinforced-concrete elements of multistory industrial buildings] Puti povysheniia proizvoditel'nosti truda na montazhe zhelezobetonnykh konstruktsii mnogoetazhnykh proizvodstvennykh zdanii; iz opyta stroek Lensovnarkhoza. Leningrad, 1962. 21 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'naia promyshlennost', no.25) (MIRA 16:3)

(Industrial buildings--Design and construction)
(Precast concrete construction)



YAKIMOV, P.A., doktor khimicheskikh nauk, professor; KURSHAKOVA, G.V.; VLASSOVA, A.G.

Cultivation of knotweed Bolygonum coriarium grig in northern conditions. Leg.prom.14 no.12:42-45 D '54. (MIRA 8:2)
(Tannins) (Knotweed)

VLASSOYEVICH, Nikolay Bronislavovich

[Flysch and methods of studying it] Flish i metodika ego izucheniia. Leningrad, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, Leningr.otd-nie, 1948. 216 p. (MIRA 13:6)
(Flysch)

VLASTELITSA, L. S.

VLASTELITSA, L.S.; KHAIT, K.M.

Serologic shifts in persons inoculated with influenza virus vaccines as indicated by the Hirst test. Trudy Len.inst.epid. i mikrobiol. 9: 186-196 '47. (MIRA 10:9)

1. Iz grippoznoy laboratorii Instituta im. Pastera (zav. lab. N.M.Romanenko)
(LENINGRAD--INFLUENZA--PREVENTIVE INOCULATION)

VLASTELITSA, L. S. and MOROZENKO, M. A.

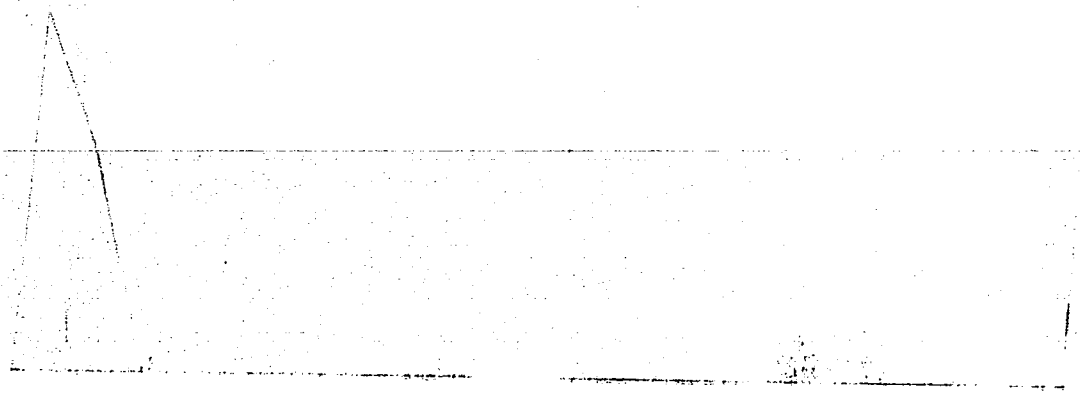
"Virological and Serological Characteristics of Type A Influenza in Adults and Children," Tr. In-ta Epidemiol, Mikrobiol, i Gigiyeny im. Pastera i In-ta Eksperim. Meditsiny Akad. Med. Nauk SSSR, No 13, 1953, pp 64-68

During the epidemic of March/April 1949 seven strains of A-type viruses were isolated which could be distinguished by their antigenic characteristics from the standard laboratory type A strains PR8 and WS. They were found to belong to subtype A'. The content and intensity of accumulation of antibodies during type A' influenza was significantly less in young children than in adults. (RZhBiol, No 5 Mar 1955) SO: Sum. No. 713, 9 Nov 55

VLASTIBOROVA, A.; C.E.

CZECH

Terpenes. LVI. Paper chromatography of azulenes. Otto Kruse and Alice Vlastiborová (Czech. Acad. Sci., Prague). *Collection Czechoslov. Chem. Communs.* 19, 782-7(1954)(In German).—See *C.A.* 48, 12708g. E. J. C.



VLASTIBOROVÁ, A

110. Terpenes. LVI. Paper chromatography of azulenes. O. Kneasl and A. Vlastiborová (*Chem. Listy*, 1954, 48 [2], 212–216).—The separation and identification of a number of azulenes by paper chromatography is described, paraffin oil being used as the stationary phase and aq. H_3PO_4 as the ascending mobile phase. The spots are detected by washing the chromatogram with water or, quantitatively, by exposing it to NH_3 gas. The effect of the degree of impregnation of the filter-paper (Whatman No. 1) with the oil, of the concn. of the acid and of the amounts of individual azulenes chromatographed on their separation is discussed, and a table of R_F values corresponding to H_3PO_4 concn. from 35 to 70 per cent. is given.

G. GLASER

MOUCKA, Milan, inz; VLASTNIKOVA, Iris, inz.

Contribution to the spectral solution analysis of slags.
Hut listy 18 no.9:665-666 S'63.

1. Vyzkumny a zkusebni ustav, Nova hut Klementa Gottwalda, Ostrava-Kuncice.

VLASTOV, B.V.

Commensalism of Cladocera and rotifers of the genus Proales living on the former. Trudy Gidrobiol.ob-va 5:299-317 '53. (MLRA 7:5)

1. Bolshevskaya biologicheskaya stantsiya MGU.
(Rotifera) (Cladocera)

VLASTOV, B.V.

European and North American rotifers of the Notommatidae family in symbiosis with Cladocera, and their related species. Zool.zhur. 32 no.6:1110-113 N-D '53. (MLRA 6:12)

1. Bolshevskaya biologicheskaya stantsiya Moskovskogo gosudarstvennogo universiteta. (Rotifera)

VLASTOV, B.V.

Morphology and systematics of lower rotifers of the order Monogononta; Proales dephnicola, commensal of Daphnia and related form. Zool.zhur.33 no.1:50-64 Ja-F '54. (MLRA 7:2)

1. Bolshevskaya biologicheskaya stantsiya Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova. (Rotifera)

VLASTOV, B.V.

In vivo diagnosis of sex in species of mussels (Unionidae) lacking external features of sexual dimorphism. Zool.zhur. 35 no.1:21-28 Ja '56. (MLRA 9:5)

1. Bolshevskaya biologicheskaya stantsiya Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(Unionidae)

VLASTOV, B.V.

Proales lenta, sp. n. and Pleurotrocha larvarum, sp.n., two new forms of rotifers of the family Notommatidae [with English summary in insert]. Zool.zhur.35 no.5:668-677 My '56. (MLRA 9:9)

1.Belshevskaya biologicheskaya stantsiya Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.
(Rotifera)

VLASTOV, B.V.

"Pelon" as a particular biocoenotic type, conditions promoting its formation and its place in the system of biocoenoses. Trudy Gidrobiol. ob-va 9:129-160 '59. (MIRA 12:9)

1. Kafedra zoologii bespozvonochnykh Moskovskogo gosudarstvennogo universiteta.

(Fresh-water fauna)

VLASTOV, B.V.; KACHANOVA, A.A.

Sex diagnosis in living Dreissena polymorpha Pallas and some data on the sexual cycle of this mollusk. Zool.zhur. 38 no.7: 991-1005 Jl '59. (MIRA 12:10)

1. Chair of Invertebrate Zoology, Moscow State University.
(Lamellibranchiata) (Sex (Biology))

VLASTOV, B.V.; YEROKHINA, L.V.

Increase of the reproduction capacity of commercial mollusks (Unio species) with reference to the reproduction of raw material resources of mother-of-pearl in our inland waters. Report No. 1: Problems and methods of work. Trudy Gidrobiol. ob-va 11:394-405 '61. (MIRA 15:1)

1. Kafedra zoologii bespozvonochnykh Moskovskogo gosudarstvennogo universiteta i Vserossiyskiy nauchno-issledovatel'skiy institut prudovogo rybnogo khozyaystva, Moskva.
(Unionidae)

VLASTOV, B.V.

Increase of the reproduction capacity of commercial mollusks (Unio species) with reference to the reproduction of raw material resources of mother-of-pearl in our inland waters. Report No.2: Intensifying natural infection of fishes with unionid larvae (glochidia). Trudy Gidrobiol. ob-va 11:406-410 '61. (MIRA 15:1)

1. Kafedra zoologii bespozvonochnykh Moskovskogo gosudarstvennogo universiteta, Moskva.

(Unionidae)

POVOLOTSKIY, L.I., inzhener; VLASOVA, A.A., inzhener.

Improving the storage of mineral fertilizers. Standartizatsiia no.3: 72-74 My-Je '56. (MLRA 9:9)

1.Komitet standartov, mer i izmeritel'nykh priborov.
(Fertilizers and manures--Preservation and storage)

VLASTOVA, N. V.

Works on the All-Union Peat Institute, (Min of Agri, RSFSR),

Number 5, 1933, 108 pages, A Compendium of Instructions on the Study of Peat and Peat Beds:

Part 2. Field Geobotanical Studies:

"Instructions on the Description of the Vegetation Cover of Bogs."
by Vlastova, N. V.

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 100-110, Jan-Feb 1950, Russian bimo per, Moscow/Leningrad (U-5511, 12 Feb 1954)

VLASTOVA, N. V.

Works of the All-Union Peat Institute, (Min of Agri. RSFSR), Number 4, 1933, 111 pages, A Compendium of Instruction on the Study of Peat and Peat Beds:

Part 1. The Geobotanical Analysis of Peat

"Instructions for Analyzing Sphagnum Mosses in Peat." by Vlastova, N. V.

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 100-110, Jan-Feb 1950, Russian bimonthly, Moscow/Leningrad (U-5511, 12 Feb 1954)

L 24841-66 EWT(d)/EWT(m)/T/EWP(1) IJP(c) BB/DJ/GG/WE

ACC NR: AP6006367 SOURCE CODE: UR/0413/66/000/002/0099/0099

AUTHORS: Khusid, A. Z.; Grishin, V. A.; Parfenov, B. P.; Vlasov-Vlasyuk, O. B.

57
56
3

ORG: none

TITLE: An electric analog device. 16 Class 42, No. 178121

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 99

TOPIC TAGS: analog system, electric analog, hydraulic equipment, engine control system

ABSTRACT: This Author Certificate presents an electric analog device for studying and adjusting the regulators of piston engines and gas turbine engines. The device contains an electronic model of the object of regulation and input and output converters for coupling the model of the object with the real apparatus (see Fig. 1). The design reproduces the dynamic characteristics of the piston engine and the gas turbine engine. It contains a hydraulic volume drive, with its input connected through the coupling converters to the electronic model of the object being regulated. The output shaft of the hydraulic volume drive is connected with the shaft of the test regulator. To eliminate "an addition" of the RPM's with an increase of the fuel supply, the device contains two hydraulic volume

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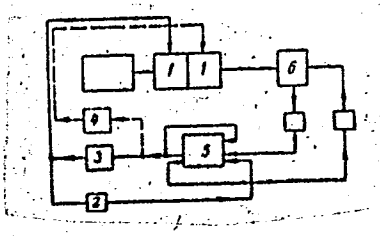

Fig. 1. 1 - hydraulic volume drive; 2 - 4 - converters; 5 - electronic model of the object of regulation; 6 - regulator.

drives. The output shaft of one of the drives is connected with the shaft of the fuel pump. The output shaft of the second drive is connected with the shaft of the test regulator. Orig. art. has: 1 figure.

SUB CODE: 09,21,13 SUBM DATE: 18Sep64

Card 2/2 dda

VLASTOVA, N.

Works of the All-Union Peat Institute, (Min. of Agri., RSFSR),
Number 3, 1933, 189 pages. Section on the Study of Peat Beds:
"The Vegetation Cover of a Transitional Bog in Orekho-Zuyevskiy Rayon
and Certain Technical Properties of the Bed." by Vlastova, N.

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 100-110,
Jan-Feb 1950, Russian bimonthly, Moscow/Leningrad (U-5511,
12 Feb 1954)

VLASTOVA, N. V.

Works of the Central Peat Excerimental Station, (Min of Agri, RSFSR)

Volume 1, 1936, 137 pages, The Peat Bogs of the Far North and the Asiatic Part of the USSR.

"The Peat Bogs of the Lower Reaches of the Ob' River" by Vlastova, N. V.

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 100-110, Jan-Feb 1950, Russian bimo per, Moscow/Leningrad (U-5511, 12 Feb 1954)

VLASTOVA, N. V.

Works of the Central Peat Experimental Station (Min of Agri, RSFSR)

Volume 6, 1939, 319 pages. "Methods of Study of Peat Bogs (Part 2)

"Technical Specifications for Detailed Survey of Peat Deposits with an Area over 100 Hectares", (Compiled by B. G. Vasil'yev, P. D. Varlygin, N. V. Vlastova, B. K. Dunayev, A. S. Provorkin, M. I. Neyshtadt, L. L. Il'inskiy, L. Ya Lenin, M. I. Pavlov and A. N. Chel'tsov).

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 109-110, Jan-Feb 1950, Russian bimonthly, Moscow/Leningrad (U-5511, 12 Feb 1954)

VLASTOVA, N.V.

Materials on the study of the vegetation of peat bogs on southern Sakhalin. Geog.sbor.no.8:76-87 '56. (MIRA 10:1)
(Sakhalin--Peat bogs)

VLASTOVA, N.V.

Distribution and naute of the habitat of different Sphagnum species in Sakhalin. Bot.zhur.41 no.10:1520-1524 O '56. (MLRA 10:1)

1. Sakhalinskiy filial Akademiii nauk SSSR, Yuzhno-Sakhalinsk.
(Sakhalin--Mosses)

DELIMARSKIY, Yu.K.; VLASYUK, N.V.

New type of polarization in the electrolysis of fused salts.
Zhur. fiz. khim. 38 no.12:2962-2964 D '64. (MIRA 18:2)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

VLASTOVA, N.V.

Prospects for using peat and peat bog soils in Sakhalin agriculture. Soob.Sakhal.kompl.nauch.-issl.inst.AN SSSR. no.2:34-46 '55. (MIRA 14:4)

(Sakhalin--Peat)

VLASTOVA, Natal'ya Vladimirovna; NEYSHTADT, M.I., otv.red.; DOLMATOV, P.S., red.izd-va; BOCHEVER, V.T., tekhn.red.

[Peat bogs of Sakhalin] Torfianye bolota Sakhalina. Moskva, Izd-vo Akad.nauk SSSR, 1960. 165 p. (MIRA 13:7)
(Sakhalin--Peat bogs)

VLASOVA, YE. K.

VLASOVA, YE. K. -- "Ecological Conditions for Raising Fish in the Ponds of the Trans-Carpathian Oblast, Ukrainian SSR." Kiev State U imeni T. G. Shevchenko. Uzhgorod, 1955. (Dissertation for the Degree of Candidate in Biological Sciences)

SO: Knizhnaya Letopis', No 1, 1956, pp 102-122, 124

KONDRAT'YEV, Kirill Yakovlevich; TVERSKOY, P.N., professor, redaktor; VLASOVA, Yu.V., redaktor; BRAYNINA, M.I., tekhnicheskiy redaktor; SOLOVEYCHIK, A.A., tekhnicheskiy redaktor

[Radiant heat exchange in the atmosphere] Luchistyi teploobmen v atmosfere. Pod red. P.N.Tverskogo. Leningrad, Gidrometeorologicheskoe izd-vo, 1956. 419 p. (MLRA 9:10)
(Heat--Radiation and absorption)
(Atmospheric temperature)

ANAPOL'SKAYA, Liya Yevseyevna; DROZDOV, O.A., doktor geograficheskikh nauk, redaktor; VLASOVA, Yu.V., redaktor; SOLOVEYCHIK, A.A., tekhnicheskiy redaktor

[Winds in the area of the steppe reservoirs of European Russia] Vetrovoi rezhim vodokhranilishch stepnogo raiona Evropeiskoi territorii SSSR. Pod red. O.A.Drozdova. Leningrad, Gidrometeorologicheskoe izd-vo, 1956. 61 p. (MLRA 9:12)
(Wind) (Reservoirs)

VLASOVA, Z. A.

VLASOVA, Z. A. --"The Approximate Solution of Marginal Problems for Equations of Elliptic Type by the Method of Reduction to Ordinary Differential Equations." Moscow 1955. (Dissertation for the Degree of Candidate in Physicomathematical Sciences.)

So.: Knizhnaya Letopis', No 7, 1956.

VLASOVETS, A.M., aspirant

Study and control of waves in navigable canals by the use of analog computers. Trudy LIVT no.64:23-36 '64. (MIRA 18:10)

VLASOVETS, A.M., aspirant; RAYEV, V.A., inzh.

Results of testing devices for the control of fluctuations caused by waves in the canal section between the Kuybyshev locks. Trudy LIVT no.64:37-45 '64. (MIRA 18:10)

VLASTOVSKIY, V G

VLASTOVSKIY, V.G., Cand Biol Sci -- (diss) "Certain laws of variability and correlation of elements of the skeleton of humans and animals after the example of tubular bones." Mos 1958, 15 pp (Mos Order of Lenin and Order of Labor Red Banner State Univ im M.V. Lomonosov, Biol - Soil Faculty) 200 copies (KL, 51-58, 101)

VLAS'YAN, R. S.

29707

Sovyetskiy fil'tr dlya vinodyel'chyeskoy promyshlyennosti. Vinodeliye i vinogradarstvo SSSR, 1949, No. 9. S. 30-31

So: Letopis' No. 40

VLASYAN, Ye.S.; YAZYCHYAN, S.S.

Viktor Amazaspovich Ambartsumian. Erevan, 1954. 72 p. (MIRA 13:4)

1. Akademiya nauk Armyanskoy SSR, Yerevan.
(Bibliography--Ambartsumian, Viktor Amazaspovich, 1908-)

VIASYAN, Ye.S.; MANASERYAN, A.S.; KARMENYAN, V.N., redaktor; KAPLANYAN, M.A., tekhnicheskiy redaktor

[Bibliography of publications of the Armenian Branch of the Academy of Sciences of the U.S.S.R. and the Academy of Sciences of the Armenian S.S.R., 1936-1956] Bibliografiia izdanii ArmFANa i Akademii nauk Armianskoi SSR, 1936-1956 gg. Erevan, 1957. 353 p. (MLRA 10:9)

1. Akademiya nauk Armyanskoy SSR, Yerivan. TSentral'naya biblioteka (Bibliography)

VLAS'EV

Volgo-Donskaia magistral'. /The Volga-Don Waterway/. (Morskoi sbornik, 1928, no. 7-8, p. 95-116, illus). DLC: V5.M8

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952 Unclassified.

VLAS'YEV, S.N., gornyy inzh.; SIDEL'NIKOV, B.N.

Using the air space method and igdanite in chalk and limestone quarries of the Volga Valley. Vzryv. delo no.54/11:335-338 '64. (MIRA 17:9)

1. Volgogradskoye stroitel'noye upravleniye Vsesoyuznogo tresta po burovzryvnym rabotam Ministerstva promyshlennosti stroitel'nykh materialov SSSR.

S/032/62/028/006/018/025
B108/B104

10.8100

AUTHORS: Bykov, V. A., Vlas'yeva, M. N., and Vsevolodov, G. N.

TITLE: Study of plastic bending equivalent to cold bending of a metal

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 6, 1962, 723-726

TEXT: The method of testing metals consists in imposing a bending moment on successive sections of a slender specimen. The real plastic deformation stress can then be found from the nominal stress and the mean relative fiber deformation $\lambda_m = (\Delta L_{ext} + \Delta L_{compr})/2L_o$, where $\Delta L_{ext} = L_{extension} - L_o$ and $\Delta L_{compr} = L_o - L_{compression}$. There are 4 figures.

ASSOCIATION: Leningradskiy korablestroitel'nyy institut (Leningrad Shipbuilding Institute)

Card 1/1

LEBEDEV, K.B.; GUSAROVA, T.D.; VLASIYEVA, V.T.

Rhenium cementation from alkali solutions. Trudy Inst. met. i obog. AN Kazakh. SSR 12:168-175 '65. (MIRA 18:10)

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[Militarization of the national economy and intensification of the contradictions of imperialism]Militarizatsiia ekonomiki i obostrenie protivorechii imperializma. Moskva, Voenizdat, 1962. 141 p. (MIRA 15:10)
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From laggers to leaders. Avt.transp. 35 no.7:37 Jl '57. (MLRA 10:8)

1. Instruktor Ulan-Udenskogo gorkoma Kommunisticheskoy Partii Sovetskogo Soyuza.
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VLASYUK, A.I., kand. arkhitektury

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Sodium sulfite method of complete analysis of hypochlorite and chlorite solutions. Tekstil. Prom. 11, No.8, 36-8 '51. (MLRA 4:6)
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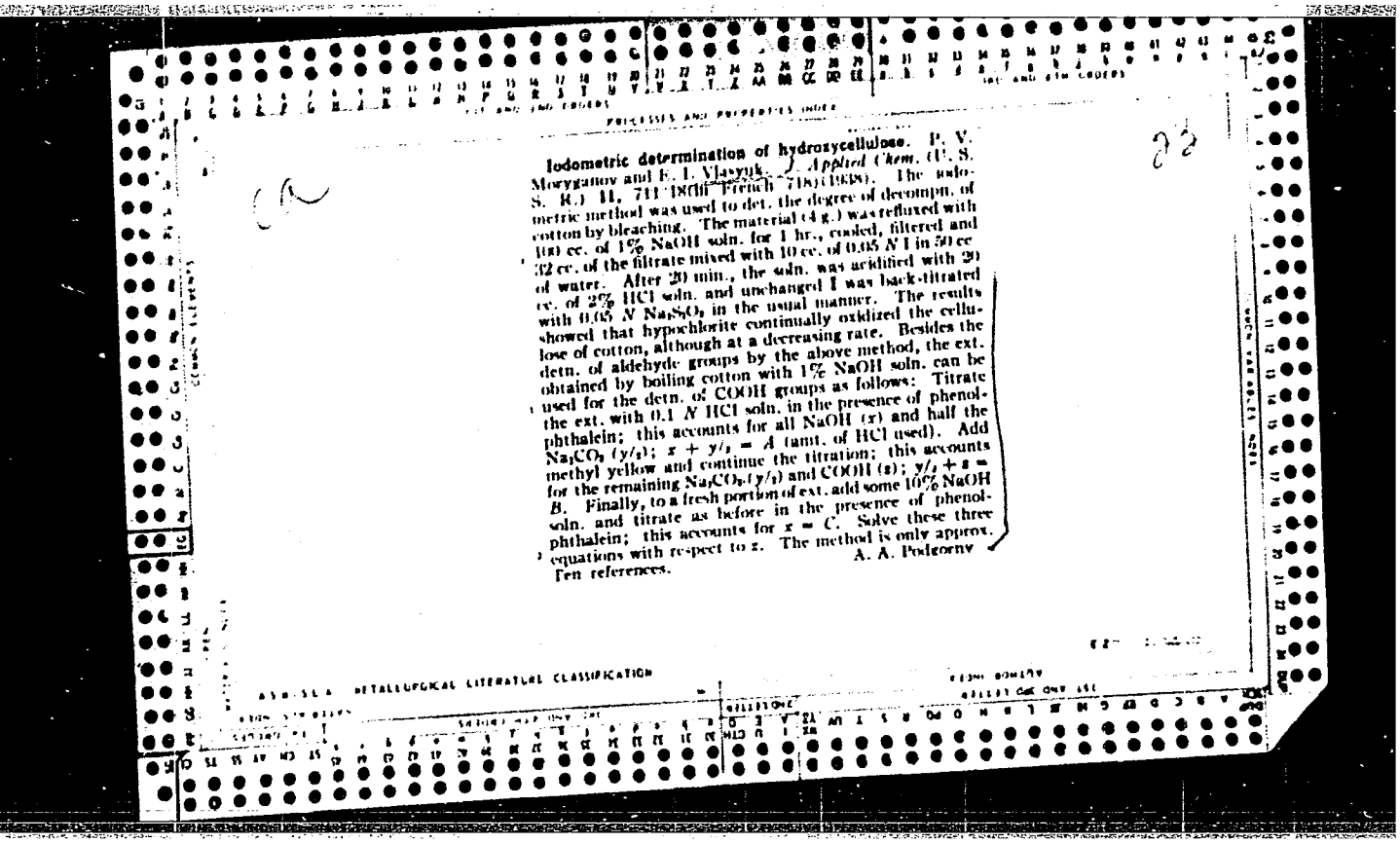
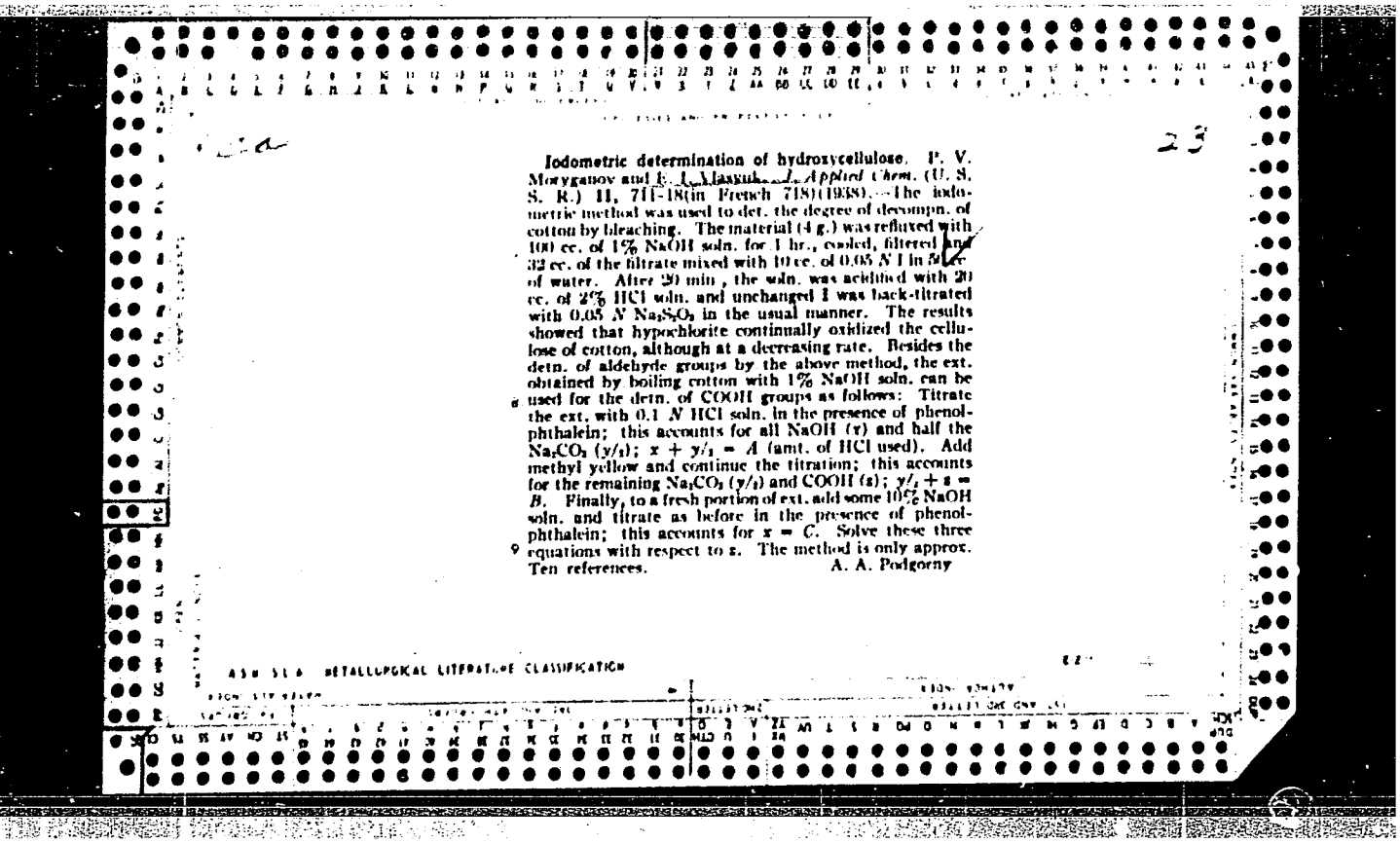


Iodometric determination of hydroxycellulose. P. V. Mosyagnov and E. I. Vlasyuk. *J. Applied Chem.* (U. S. S. R.) 11, 711-18(in French 718)(1938). The iodometric method was used to det. the degree of decompn. of cotton by bleaching. The material (4 g.) was refluxed with 100 cc. of 1% NaOH soln. for 1 hr., cooled, filtered and 32 cc. of the filtrate mixed with 10 cc. of 0.05 *N* I in 50 cc. of water. After 20 min., the soln. was acidified with 20 cc. of 2% HCl soln. and unchanged I was back-titrated with 0.05 *N* $Na_2S_2O_3$ in the usual manner. The results showed that hypochlorite continually oxidized the cellulose of cotton, although at a decreasing rate. Besides the detn. of aldehyde groups by the above method, the ext. obtained by boiling cotton with 1% NaOH soln. can be used for the detn. of COOH groups as follows: Titrate the ext. with 0.1 *N* HCl soln. in the presence of phenolphthalein; this accounts for all NaOH (*x*) and half the Na_2CO_3 (*y*/2); $x + y/2 = A$ (amt. of HCl used). Add methyl yellow and continue the titration; this accounts for the remaining Na_2CO_3 (*y*/2) and COOH (*z*); $y/2 + z = B$. Finally, to a fresh portion of ext. add some 10% NaOH soln. and titrate as before in the presence of phenolphthalein; this accounts for $x = C$. Solve these three equations with respect to *z*. The method is only approx. Ten references.

A. A. Podgorny



Iodometric determination of hydroxycellulose. P. V. Morygunov and [illegible] Vlasyuk. *J. Applied Chem.* (U. S. S. R.) 11, 711–18(in French 718)(1938).—The iodometric method was used to det. the degree of decompn. of cotton by bleaching. The material (4 g.) was refluxed with 100 cc. of 1% NaOH soln. for 1 hr., cooled, filtered and 32 cc. of the filtrate mixed with 10 cc. of 0.05 *N* I in 50 cc. of water. After 20 min., the soln. was acidified with 20 cc. of 2% HCl soln. and unchanged I was back-titrated with 0.05 *N* $Na_2S_2O_3$ in the usual manner. The results showed that hypochlorite continually oxidized the cellulose of cotton, although at a decreasing rate. Besides the detn. of aldehyde groups by the above method, the ext. obtained by boiling cotton with 1% NaOH soln. can be used for the detn. of COOH groups as follows: Titrate the ext. with 0.1 *N* HCl soln. in the presence of phenolphthalein; this accounts for all NaOH (*x*) and half the Na_2CO_3 ($y/_2$); $x + y/_2 = A$ (amt. of HCl used). Add methyl yellow and continue the titration; this accounts for the remaining Na_2CO_3 ($y/_2$) and COOH (*z*); $y/_2 + z = B$. Finally, to a fresh portion of ext. add some 10% NaOH soln. and titrate as before in the presence of phenolphthalein; this accounts for $x = C$. Solve these three equations with respect to *z*. The method is only approx. Ten references. A. A. Podgorny

VLASYUK, E.A.

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3976 AEC-tr-2433((Pt. 4)(p.89-100))
THE EFFECT OF NUCLEAR RADIATIONS ON PLANTS.
F. A. Vlasyuk. p.89-100 of CONFERENCE OF THE
ACADEMY OF SCIENCES OF THE USSR ON THE PEACE-
FUL USES OF ATOMIC ENERGY, JULY 1-5, 1955.
SESSION OF THE DIVISION OF BIOLOGICAL SCIENCE.
(Translation). 12p.
This paper was originally abstracted from the Russian
and appeared in Nuclear Science Abstracts as NSA 9-7618.