EDUDOC SERVICES: CURRENT CONTENT



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February - 2020

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Introduction

"**Current Contents**" prepared by Library and Documentation Division aims to identify the articles published in the learned journals received by the library in the month of February 2020.

Current Contents are arranged alphabetically under the broad subject headings. It gives the details about the name of the Journal, volume, issue month and year of publication. It will be our endeavour to bring out this as a reference tool, which will make our readers aware about the current contents available in different learned journals of their subject of interest.

Current Contents will be useful to our faculty members in selecting/recommending relevant articles for their research.

Keeping in mind the integration of ICT and Digitisation, attempt has been made to provide the Web-link of the current issues, which will facilitate the readers to access the articles, except the '*' marked journal titles

We eagerly await to received your views and comments.

(Prof. Saroj Yadav)
Chairperson, LDD,
NCERT, New Delhi

Sr. No.	Name of Journals	Vol.	Issue	Month	Year	Pages
	Economics					
1.	Economist	434	9175 9176 9177 9178 9179 9180 9181 9182	4 Jan 11 Jan 18 Jan 25 Jan 1 Feb 8 Feb 15 Feb 22 Feb	2020	17-32
2.	The Indian Economic and Social History Review	56	4	Oct-Dec	2019	37
3.	Quarterly Journal of Economics	134	1	Feb	2019	75
	Education					
4.	International Journal of Educational Development	63 69 70		Nov Sep Oct	2018 2019 2019	43-45
	Educational Psychology					
5.	Journal of Educational Psychology	112	1 2	Jan Feb	2020	49-52
	Educational Research					
6.	शैक्षणिक संदर्भ	12	69(126)	Jan-Feb	2019	78
7.	Assessment for Effective Intervention	45	1	Dec	2019	3
8.	Assessment in Education: Principles, policy & Practice	26	6	Dec	2019	4
9.	Harvard Educational Review	89	4	Winter	2019	34-35
	Geography					
10.	Journal of Geography	118	1 2	Jan-Feb Mar-Apr	2019	53-54
11.	National Geographic Magazine	7	6 7	Jan Feb	2020	62-65
	Higher Education					
12.	University News	58	2 3	13 Jan 20 Jan	2020	102-105
	Library Science					
13.	IASLIC Bulletin	64	4	Dec	2019	36

14.	ISST Journal of Advances in Librarianship	10	1 2	Jan-Jun Jul-Dec	2019	41-42
15.	Library Herald : Journal of the Delhi Library Association	57	4	Dec	2019	58
	Linguistics					
16.	English Teaching Professional		126	Jan	2020	33
17.	Linguistics and Education	54		Dec	2019	59
	Physics					
18.	American Journal of Physics	88	1	Jan	2020	1-2
19.	Physics Today	73	1	Jan	2020	72-73
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20.	Cognitive Psychology	116	-	Feb	2020	7
21.	Indian Journal of Positive Psychology	10	4	Dec	2019	40
22.	Journal of Applied Developmental Psychology	66	-	Jan-Feb	2020	46
23.	Journal of Counseling & Development	98	1	Jan	2020	47-48
24.	Journal of School Psychology	77		Dec	2019	56-57
25.	Psychological Review	127	1	Jan	2020	74
	Science					
26.	Current Science	118	1 2 3	10 Jan 25 Jan 10 Feb	2020	8--16
27.	New Scientist	244	3263 3264 3265 3266 3267 3268	4 Jan 11 Jan 18 Jan 25 Jan 1 Feb 8 Feb	2020	66-71
28.	Science	367	6473 6474 6475 6476	3 Jan 10 Jan 17 Jan 24 Jan	2020	81-88
	Science Education					
29.	Journal of the Learning Science	28	4-5	Sep-Dec	2019	55

30.	Resonance: Journal of Science Education	25	2	Feb	2020	77
31.	Scientific American	322	1 2	Jan Feb	2020	89-92
32.	School Science Review	101	375	Dec	2019	79-80
	Social Science					
33.	Indian Journal of Health and Well-being	10	10-12	Oct-Dec	2019	38-39
34.	Man and Development *	41	4	Dec	2019	60
35.	Man and Life	45	3-4	Jul-Dec	2019	61
36.	Seminar		725 726	Jan Feb	2020	93-94
	Special Education					
37.	British Journal of Special Education	46	4	Dec	2019	5
38.	Remedial and Special Education	40	6	Nov-Dec	2019	76
	Teacher Education					
39.	Teaching and Teacher Education: An International Journal of Research and studies	81 82 84 88 89		May Jun Aug Feb Mar	2019 2019 2019 2020 2020	95-101

AMERICAN JOURNAL of PHYSICS

CODEN: AJPIAS
ISSN: 0002-9505

Volume 88, No. 1
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Cover figure: Electric field lines and electric field amplitudes for a point charge moving in a circle (the green arc) at 0.9 light speed. For details see the article on p. 5.

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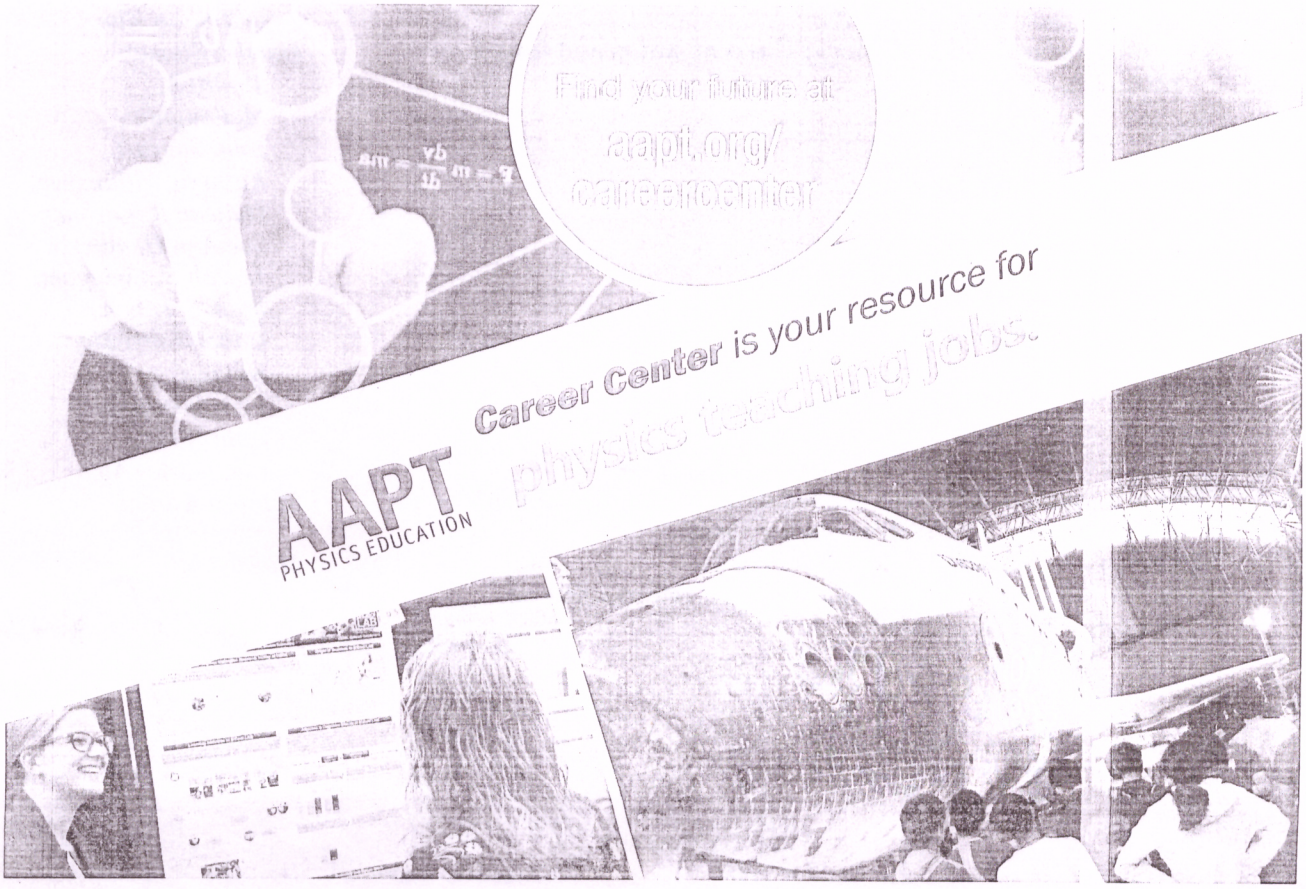
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Number 4
December 2019

A quarterly nasen journal

British Journal of Special Education

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Cognitive Psychology 116, February 2020

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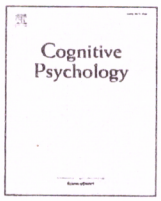


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Contents lists available at ScienceDirect

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Cognitive Psychology is covered in Current Contents/Social & Behavioral Sciences, ERIC, PsycINFO Psychological Abstracts; Research Alert and Social Sciences Citation Index. Also covered in the abstract and citation database Scopus®. Full text available on Science-Direct®.

0010-0285(202002)116:C;1-L

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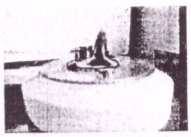
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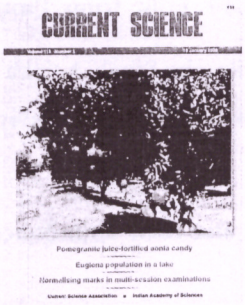
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◀ COVER. Pomegranate tree (Source: Google). See page 114 for an article on optimization of process variables for preparation of pomegranate juice-fortified aonla candy.

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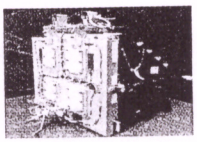
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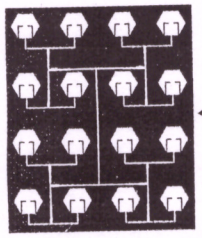
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Founded: 1932

ISSN: 0011–3891

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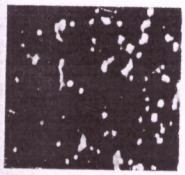
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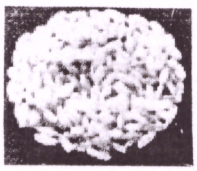
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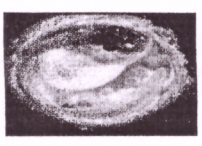
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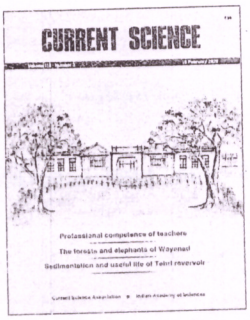
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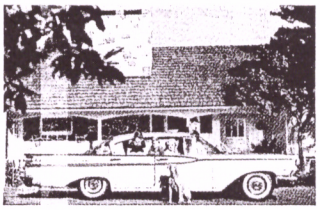
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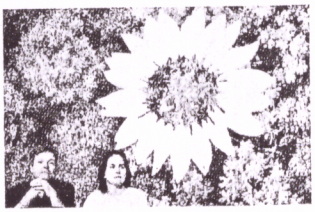
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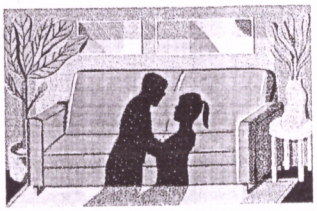
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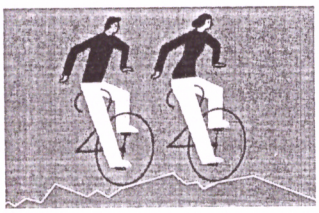
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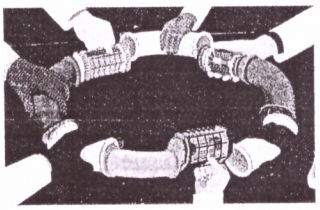
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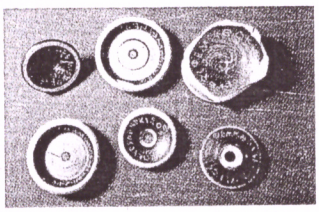
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The Economist

Volume 434 Number 9175

Published since September 1843
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M.C.I. (P) No.064/09/2019 PPS 677/11/2012(022861)



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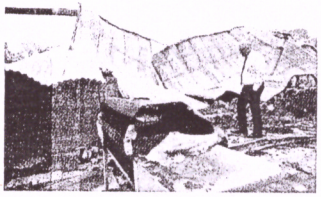
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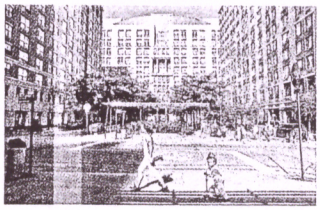
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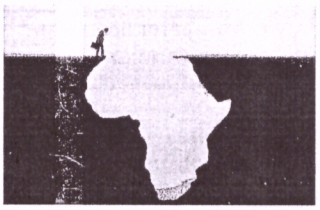
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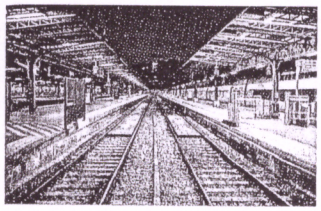
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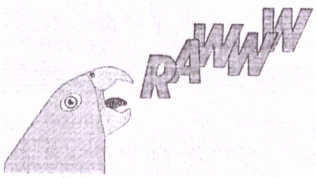
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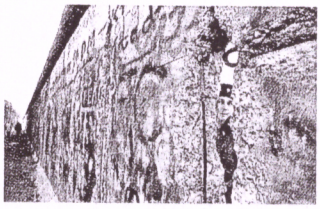
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Volume 434 Number 9176

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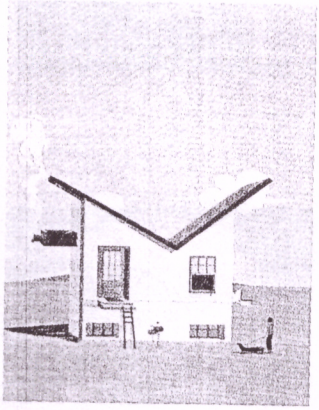
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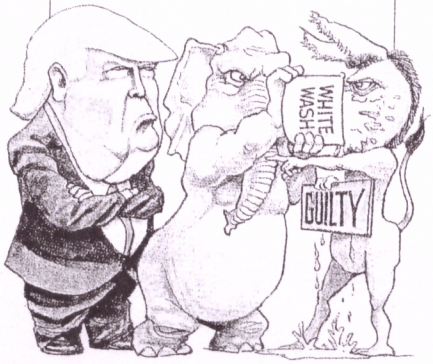
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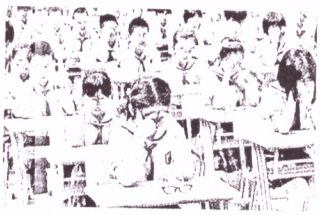


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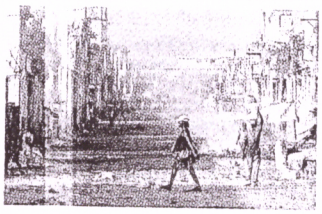


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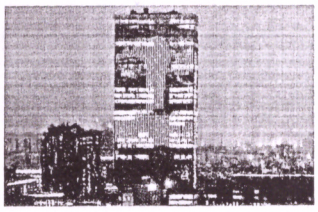
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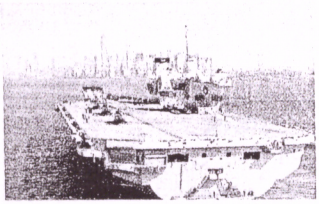
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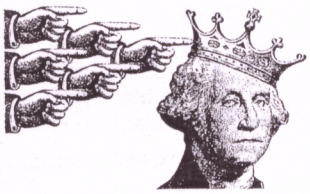
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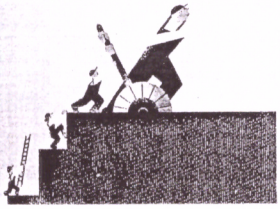
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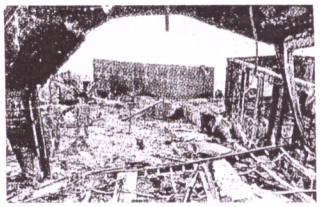
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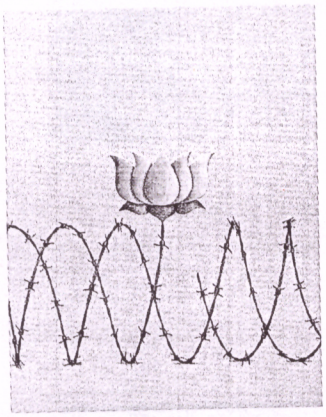
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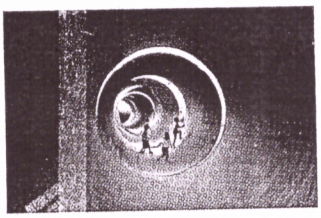
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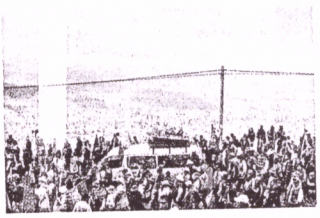
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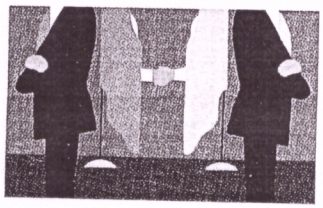
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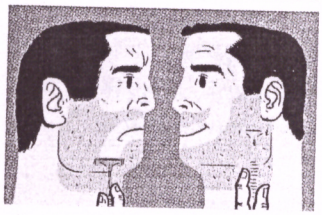
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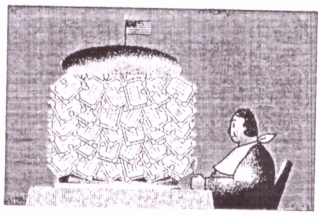
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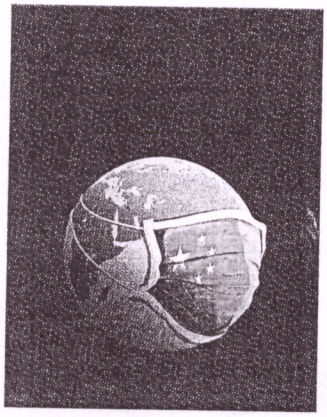
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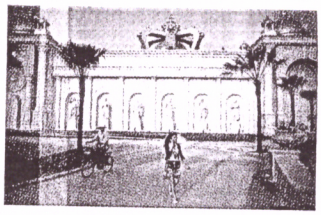
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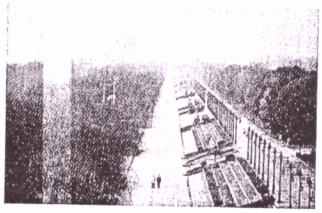
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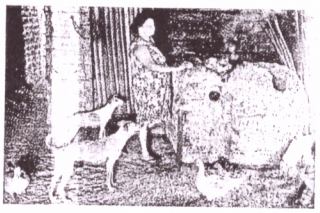


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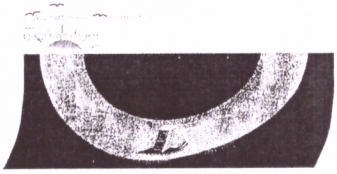
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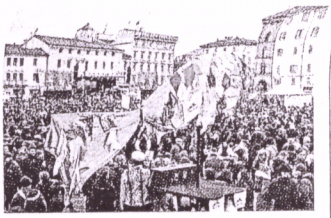
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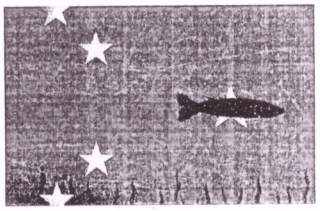
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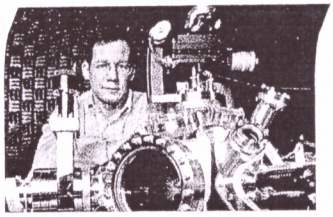
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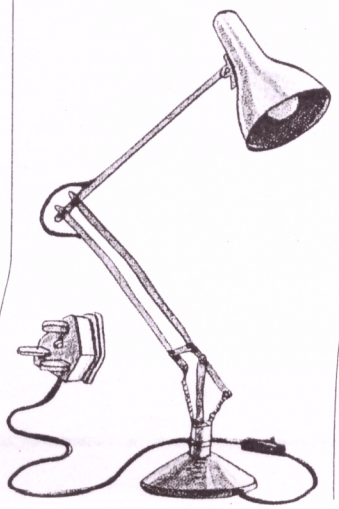
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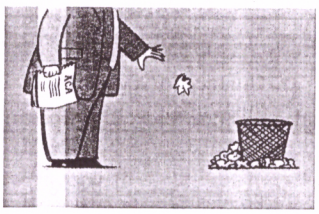
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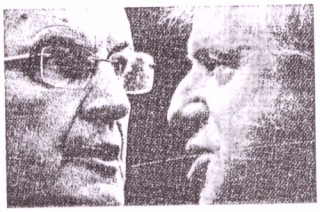
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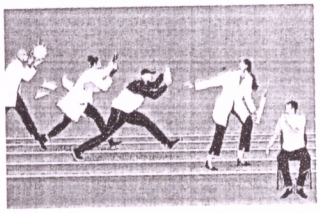
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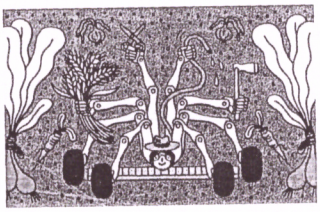
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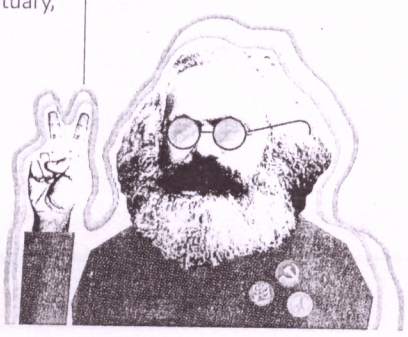
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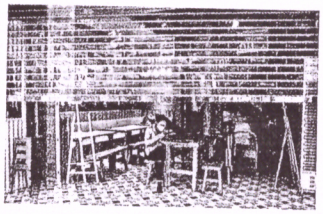


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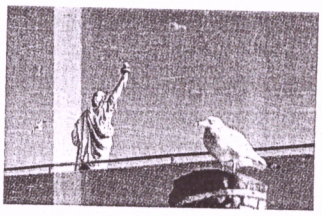
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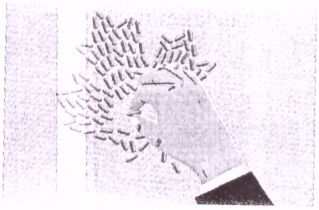


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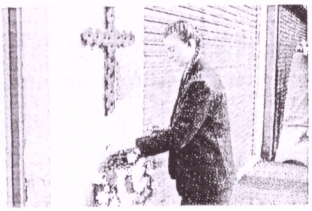
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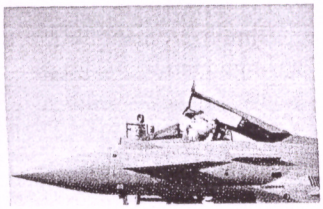
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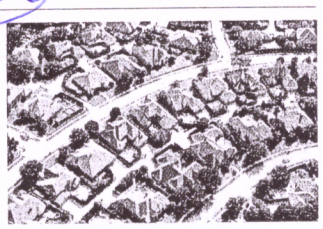
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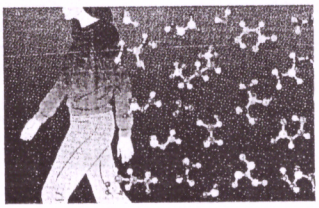
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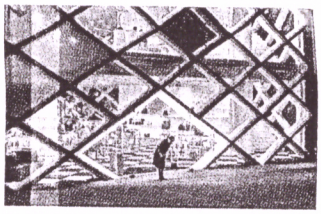
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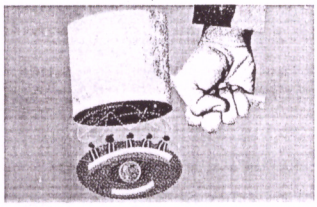
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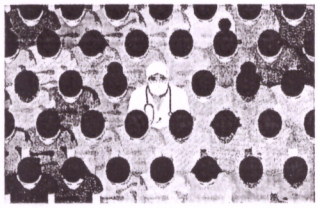
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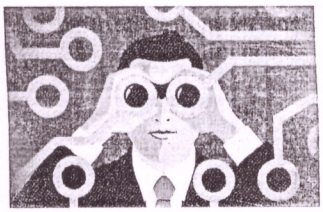
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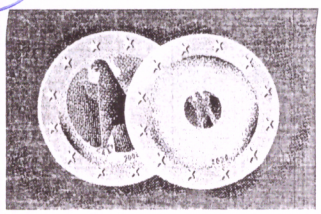
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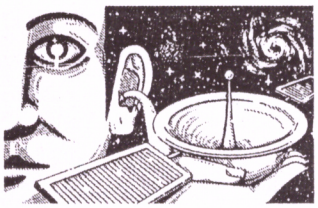
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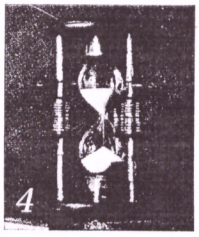
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(42) ISSN : 0976-9021

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Full text available on ScienceDirect®.
VOCEDplus.

ISSN 0738-0593
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Full text available on ScienceDirect®.
VOCEDplus.

ISSN 0738-0593
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Full text available on ScienceDirect®.
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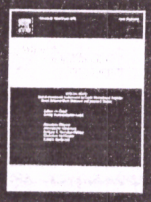
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Journal of Geography

March–April, 2019 • Volume 118, Number 2 • National Council for Geographic Education

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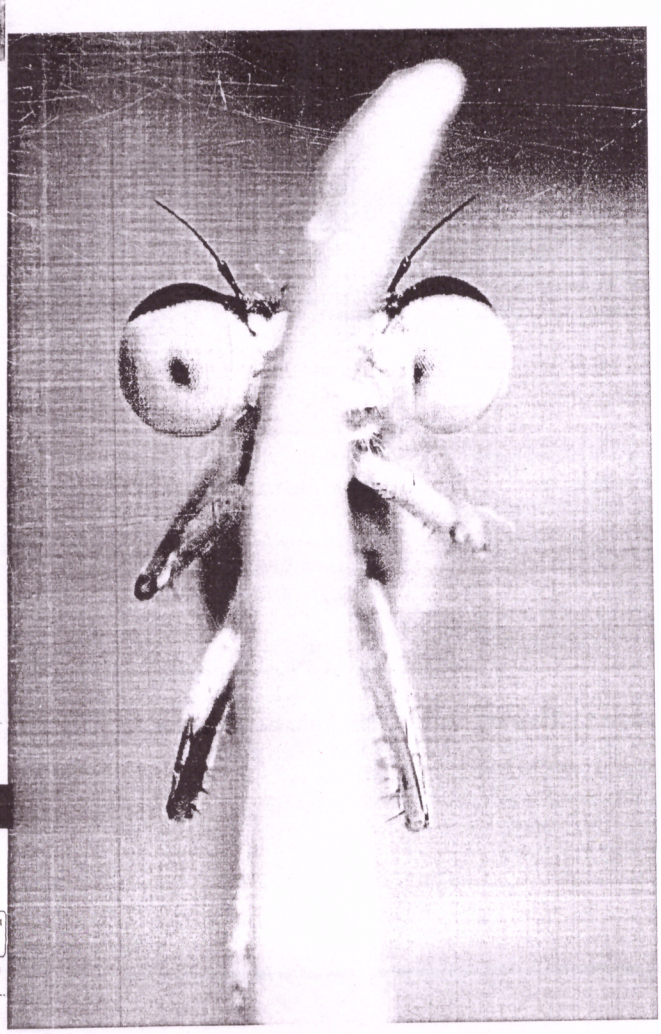
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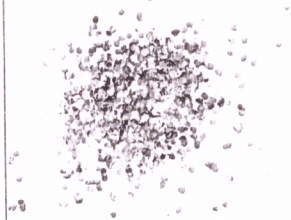
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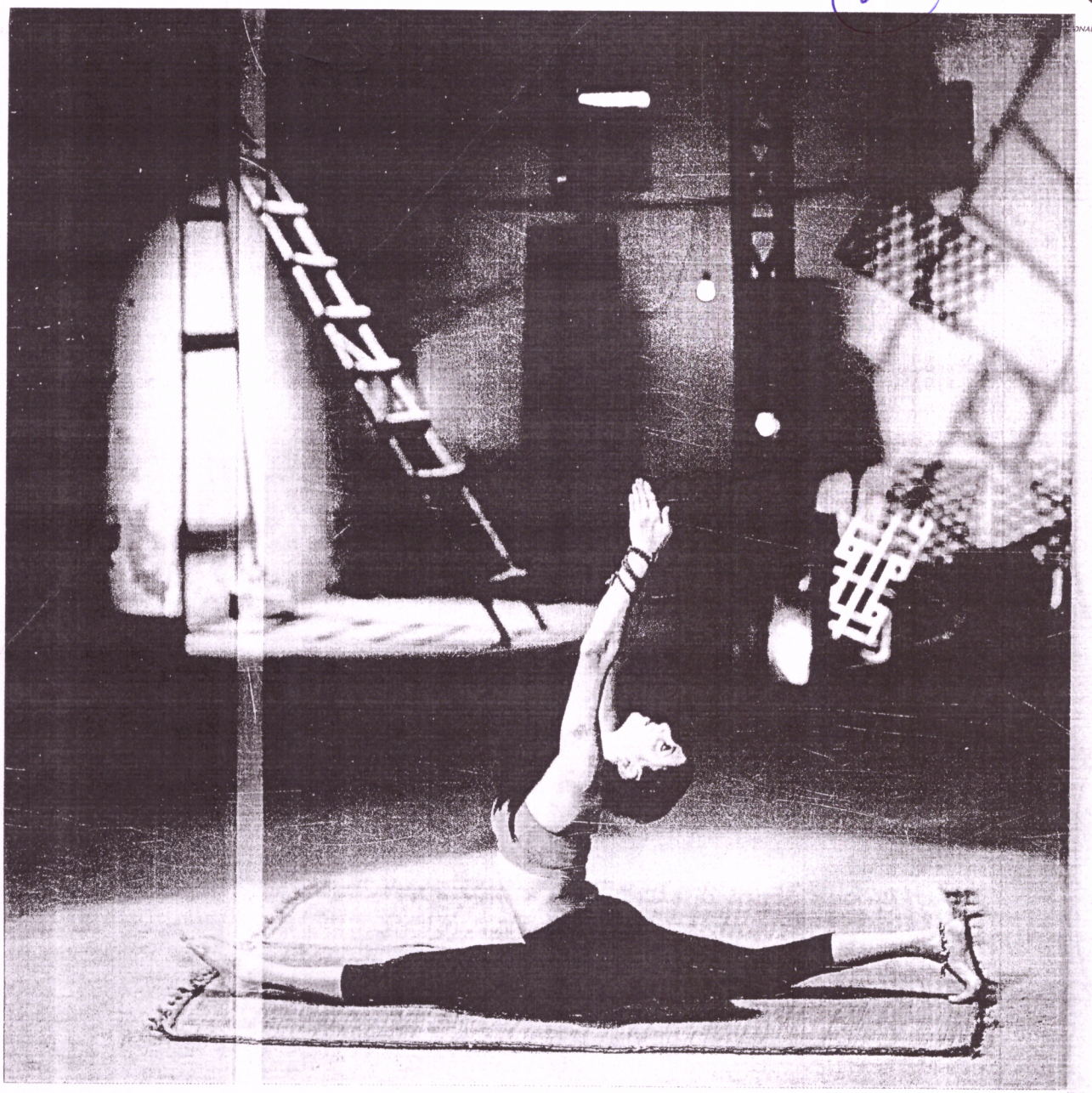
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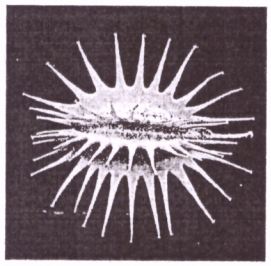
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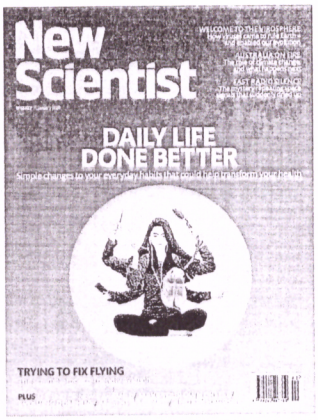
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This talk will save your life
Want to eat better, lose weight and sort the fads from science facts? Join us in London on 26 February for a myth-busting guide to living healthier for longer. Find out more at newscientist.com/events

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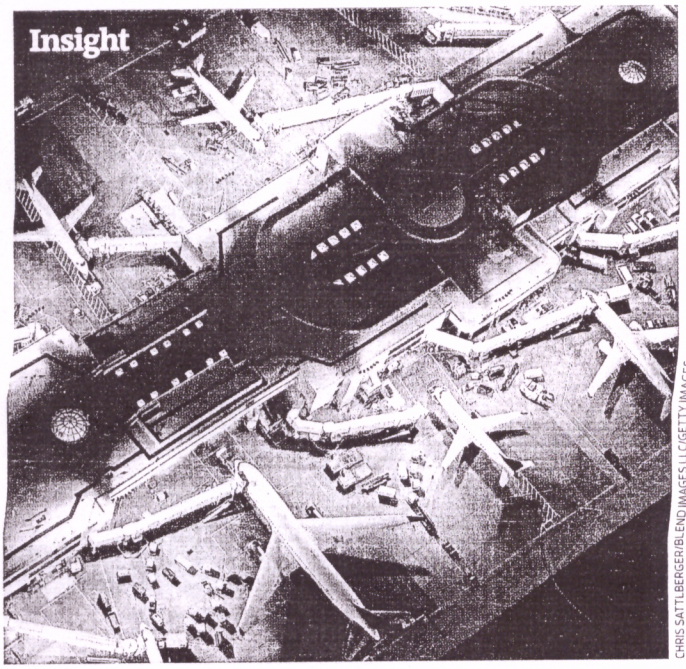
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Join us in London on 12 February to discover the science behind sleep and rest. Find out more at newscientist.com/events

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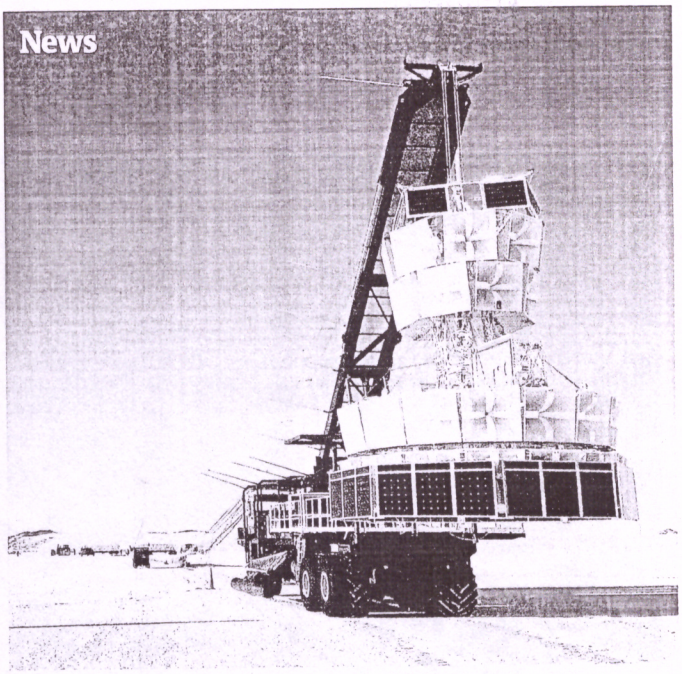
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Explore the discoveries that are rewriting the story of our origins
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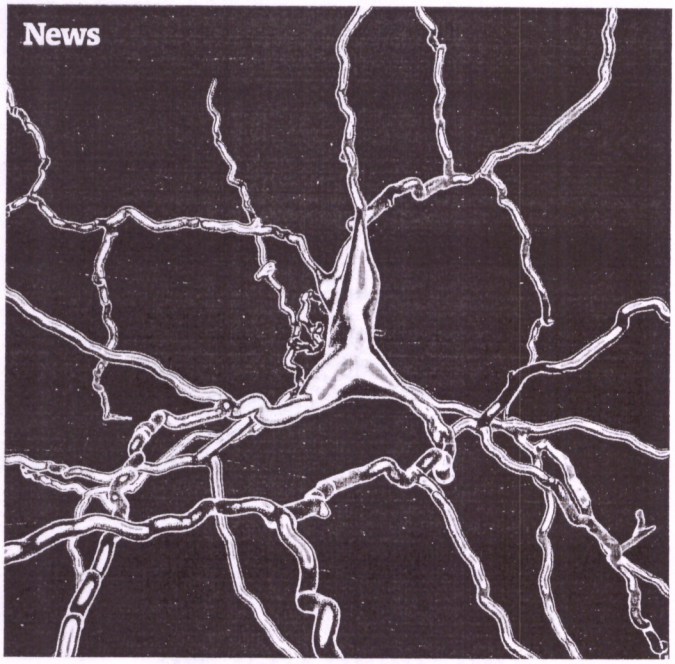
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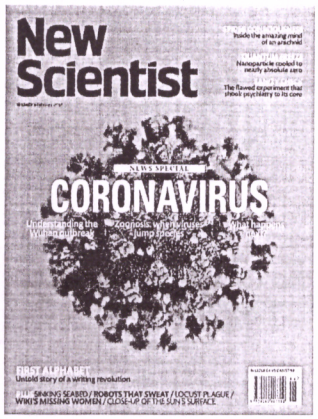
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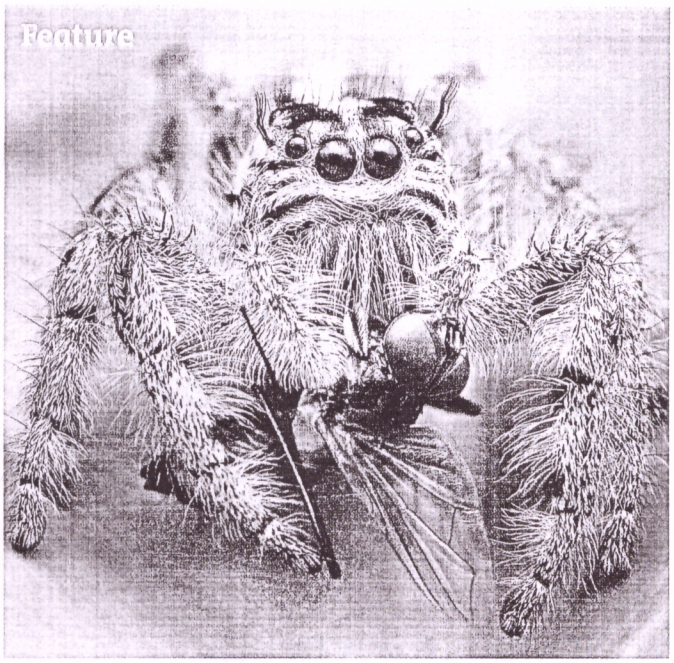
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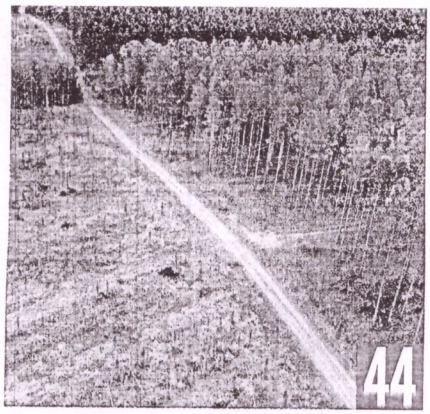
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Various sounds in nature shape how animals, including humans, interact with their environment.

36 Harmonies keep the peace of heavenly

Aviva Rothman

The great astronomer linked the speed of planetary orbits to musical scales—and to the harmonious interaction of humans on Earth during a time of religious warfare.

44 Negative carbon dioxide emissions

David Kramer

As the world continues to spew carbon dioxide at record levels, it's becoming clear that emissions reductions alone can't prevent the greenhouse gas from rising to dangerous levels.

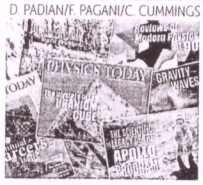


ON THE COVER: Carbon dioxide emissions are expected to reach record levels this year, even as the need for dramatic reductions is becoming more obvious. Beginning on **page 44**, PHYSICS TODAY's news editor David Kramer reviews some of the ways to remove CO_2 directly from the atmosphere. Shown here is a Climeworks plant that uses direct air capture. The Swiss company is the first to commercially deploy the technology. (Photo courtesy of Climeworks.)

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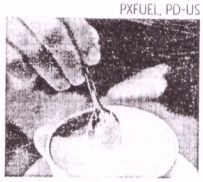
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Best of 2019

Take a look at PHYSICS TODAY's most popular stories from last year, including several that can be found only online. Topics include a baffling crystal that melts at two different temperatures and an explanation of why Mercury is, on average and most frequently, the nearest planet to Earth.
physicstoday.org/Jan2020a

PXFUEL, PD-US



Sound of solutes

Recently a research team was able to distinguish between sand from different beaches by analyzing the sound of a stirrer mixing the samples into an acidic solution. David Adam explains how a cup of hot chocolate led to the development of a technique that characterizes solids via acoustic measurements.
physicstoday.org/Jan2020b

NOAA



5G and weather

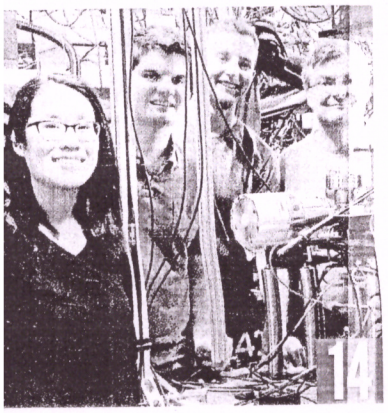
In November an international delegation agreed on an emission standard for 5G telecommunication networks operating at 24 GHz. PHYSICS TODAY's Alex Lopatka reports that many meteorologists think the new limits aren't strict enough to avoid contaminating the data collected by moisture-tracking weather satellites.
physicstoday.org/Jan2020c

PHYSICS TODAY (ISSN 0031-9228, coden PHTOAD) volume 73 number 1. Published monthly by the American Institute of Physics, 1305 Walt Whitman Rd, Suite 300, Melville, NY 11747-4300. Periodicals postage paid at Huntington Station, NY, and at additional mailing offices. POSTMASTER: Send address changes to PHYSICS TODAY, American Institute of Physics, 1305 Walt Whitman Rd, Suite 300, Melville, NY 11747-4300. Views expressed in PHYSICS TODAY and on its website are those of the authors and not necessarily those of AIP or any of its member societies.

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QJE 134(1) 1–556 (2019)
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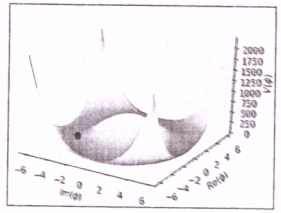
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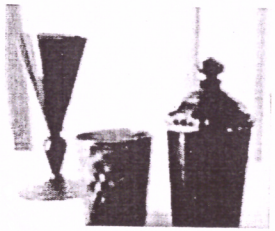
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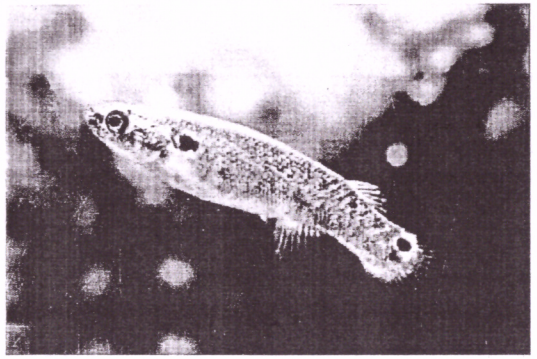
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The cover image features the painting on an easter egg made by Alexander Grothendieck. The GRR theorem and Tate isogeny theorem are stated on the egg. Grothendieck gifted it to Tate on the easter day of 1964.

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John Torrence Tate Jr.
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Health & Safety

For all practical procedures described in *SSR*, we have attempted to ensure that:
- all recognised hazards have been identified;
- appropriate precautions are suggested;
- where possible procedures are in accordance with commonly adopted model risk assessments;
- if a special risk assessment is likely to be necessary this is highlighted.

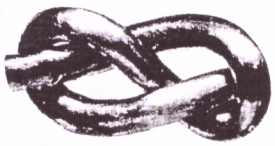
However errors and omissions can be made, and employers may have adopted different standards. Therefore, before any practical activity, teachers should always check their employer's assessment. Any local rules issued by their employer must be obeyed, whatever is recommended in *SSR*.

Unless the context dictates otherwise it is assumed that:
- practical work is conducted in a properly equipped laboratory;
- any mains-operated and other equipment is properly maintained;
- any fume cupboard operates at least to the standard of CLEAPSS Guide G9;
- care is taken with normal laboratory operations such as heating substances or handling heavy objects;
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- eye protection is worn whenever there is any recognised risk to the eyes;
- fieldwork takes account of any guidelines issued by the employer;
- pupils are taught safe techniques for such activities as heating chemicals or smelling them, and for handling microorganisms.

Readers requiring further guidance are referred to:
Hazcards (CLEAPSS, 2016 and updates)
Topics in Safety, 3rd edn (ASE, 2001; updates available at www.ase.org.uk/resources/topics-in-safety
Safeguards in the School Laboratory, 11th edn (ASE, 2006)
Preparing COSHH Risk Assessments for Project Work in Schools (SSERC, 1991)
SSERC hazardous chemicals database (www.sserc.org.uk/health-safety/chemistry-health-safe/hazchem_database-2/)
Be Safe! Health and Safety in School Science and Technology for Teachers of 3- to 12-Year-olds, 4th edn (ASE, 2011)

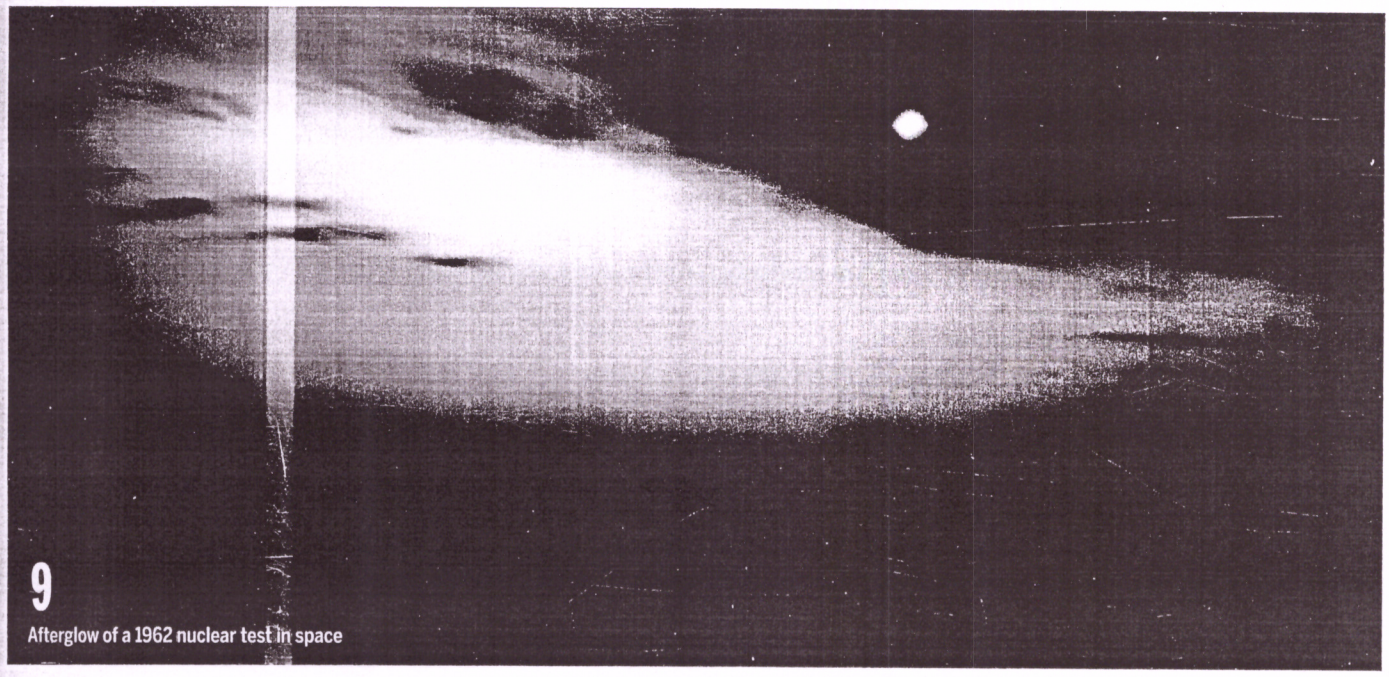
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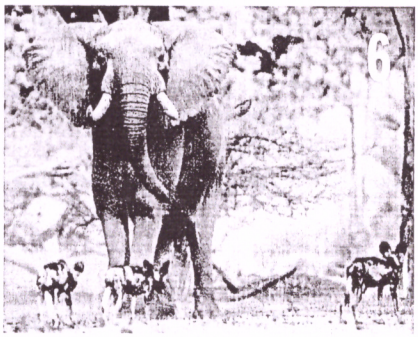
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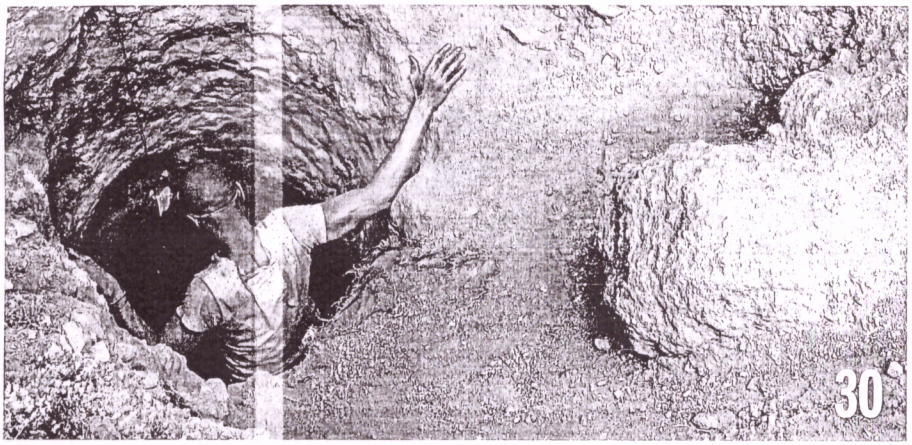
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Immature trap of the carnivorous plant *Utricularia gibba* (~200 μm in width), illustrating its two-layered cellular structure. Such cup-shaped leaves have evolved multiple times as a mechanism for trapping animals. Analyzing *U. gibba*, researchers used a combination of molecular genetics and computer modeling to reveal how shifts in gene expression domains can account for repeated evolution of cup shapes from species with planar leaves. See pages 24 and 91. *Image: Karen Lee and Claire Bushell*

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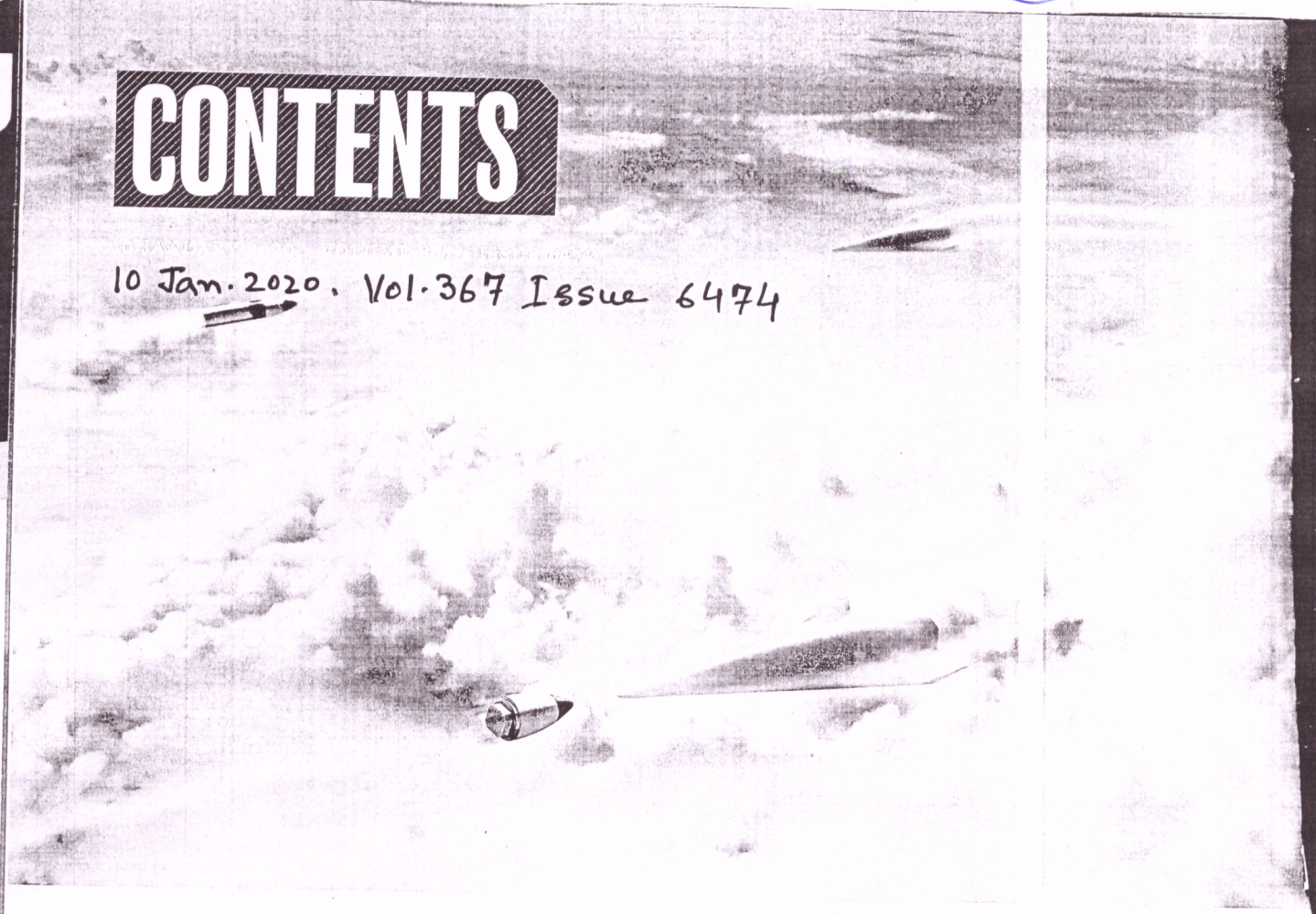
SCIENCE (ISSN 0036-8075) is published weekly on Friday, except last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2020 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership, including subscription (12 months): $165 ($74 allocated to subscription). Domestic institutional subscription (51 issues): $2148; Foreign postage extra: Air assist delivery: $98. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #125488122. Publications Mail Agreement Number 1069624. **Printed in the U.S.A.**
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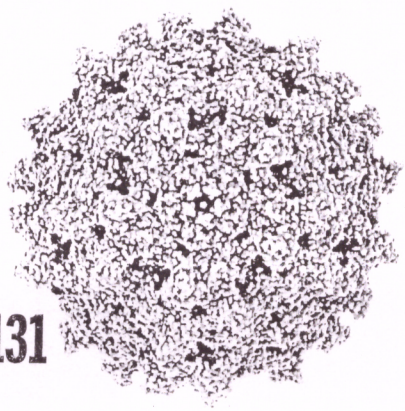
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SCIENCE (ISSN 0036-8075) is published weekly on Friday, except last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices.

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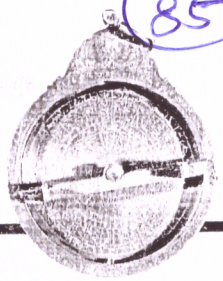
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Translucently colored nucleus of a mammalian cerebellar granule neuron. This 3D rendering illustrates the specific heterochromatin subdomain type defined by the overlap of histones imaged by electron microscopy (EM) and cryogenic super-resolution fluorescence microscopy. A thin translucent shell surrounding the nucleus represents the nuclear membrane, and a thin slab of 3D-rendered EM data (gray) slices through the nucleus. The circles at lower right are cross-sectional views of mitochondria. See page 265.
Image: D. Hoffman, G. Shtengel, E. Betzig, H. Hess, Janelia Research Campus; K. Campbell, D. Stabley, D. Solecki, St. Jude Children's Research Hospital

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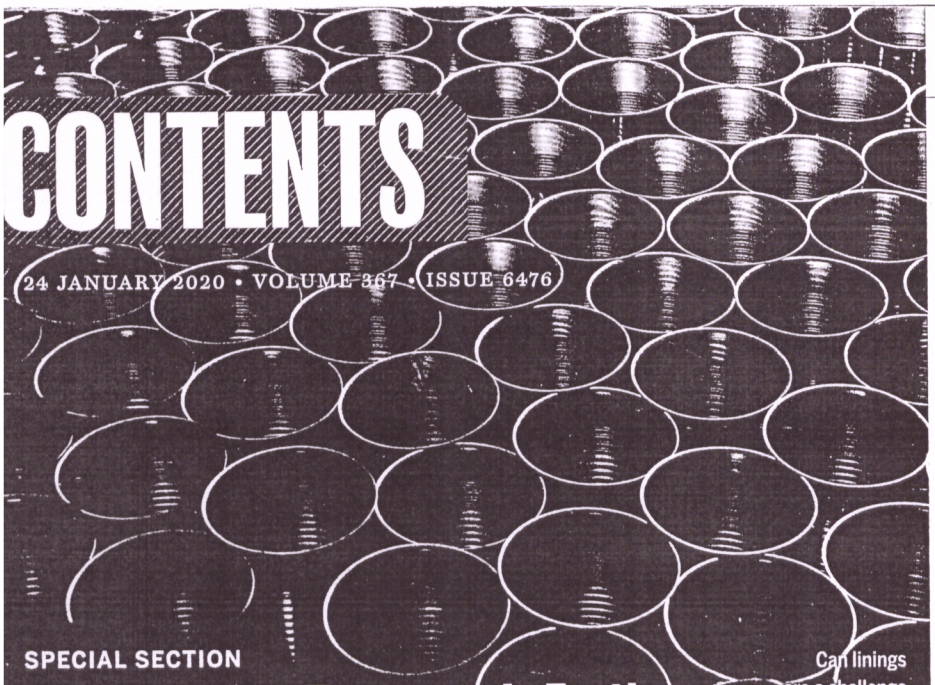
SCIENCE (ISSN 0036-8075) is published weekly on Friday, except last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals m postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2020 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domest individual membership, including subscription (12 months): $165 ($74 allocated to subscription). Domestic institutional subscription (51 issues): $2148; Foreign postage extra: Air assist delivery: $98. First class, airmail, student, an emeritus rates on request. Canadian rates with GST available upon request, GST #125488122. Publications Mail Agreement Number 1069624. **Printed in the U.S.A.**
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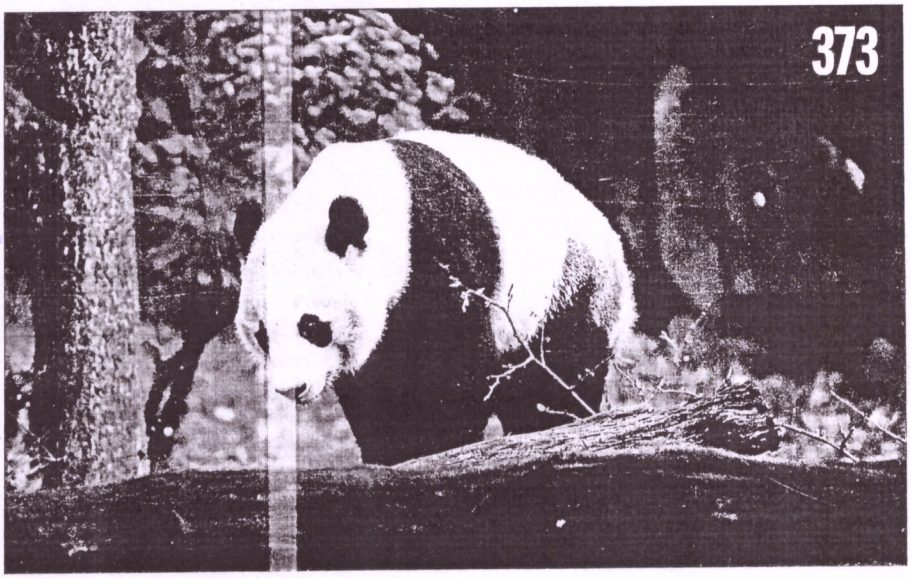
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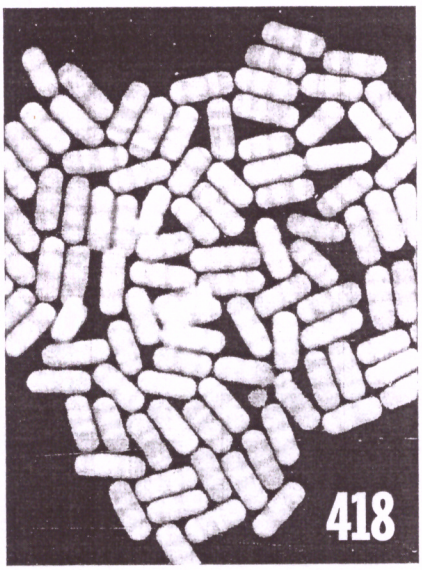
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SCIENCE (ISSN 0036-8075) is published weekly on Friday, except last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2020 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership, including subscription (12 months): $165 ($74 allocated to subscription). Domestic institutional subscription (51 issues): $2148; Foreign postage extra: Air assist delivery: $98. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #125488122. Publications Mail Agreement Number 1069624. **Printed in the U.S.A.**
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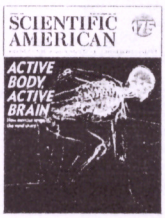
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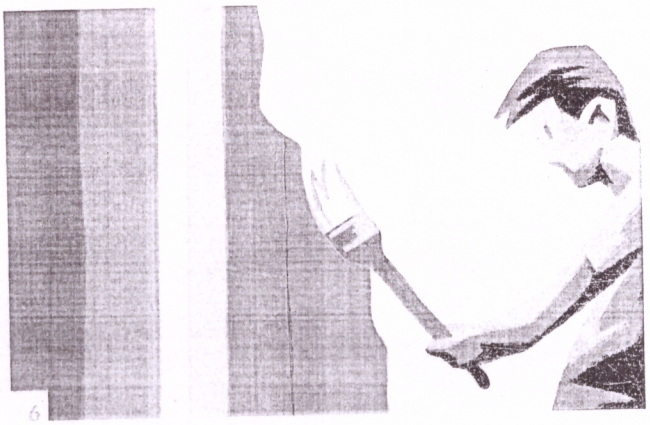
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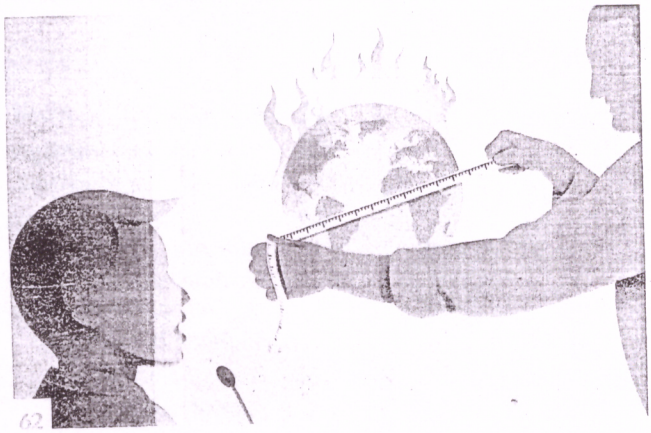
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Scientific American (ISSN 0036-8733), Volume 322, Number 1, January 2020, published monthly by Scientific American, a division of Nature America, Inc., 1 New York Plaza, Suite 4600, New York, N.Y. 10004-1562. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 40012504. Canadian BN No. 127387652RT; TVQ1218059275 TQ0001. Publication Mail Agreement #40012504. Return undeliverable mail to Scientific American, P.O. Box 819, Stn Main, Markham, ON L3P 8A2. **Individual Subscription rates:** 1 year $49.99 (USD), Canada $59.99 (USD), International $69.99 (USD). **Institutional Subscription rates:** Schools and Public Libraries: 1 year $84 (USD), Canada $89 (USD), International $96 (USD). Businesses and Colleges/Universities: 1 year $399 (USD), Canada $405 (USD), International $411 (USD). Postmaster: Send address changes to Scientific American, Box 3187, Harlan, Iowa 51537. **Reprints inquiries: (212) 451-8415. To request single copies or back issues, call (800) 333-1199. Subscription inquiries: U.S. and Canada (800) 333-1199; other (515) 248-7684. Send e-mail to scacustserv@cdsfulfillment.com.**

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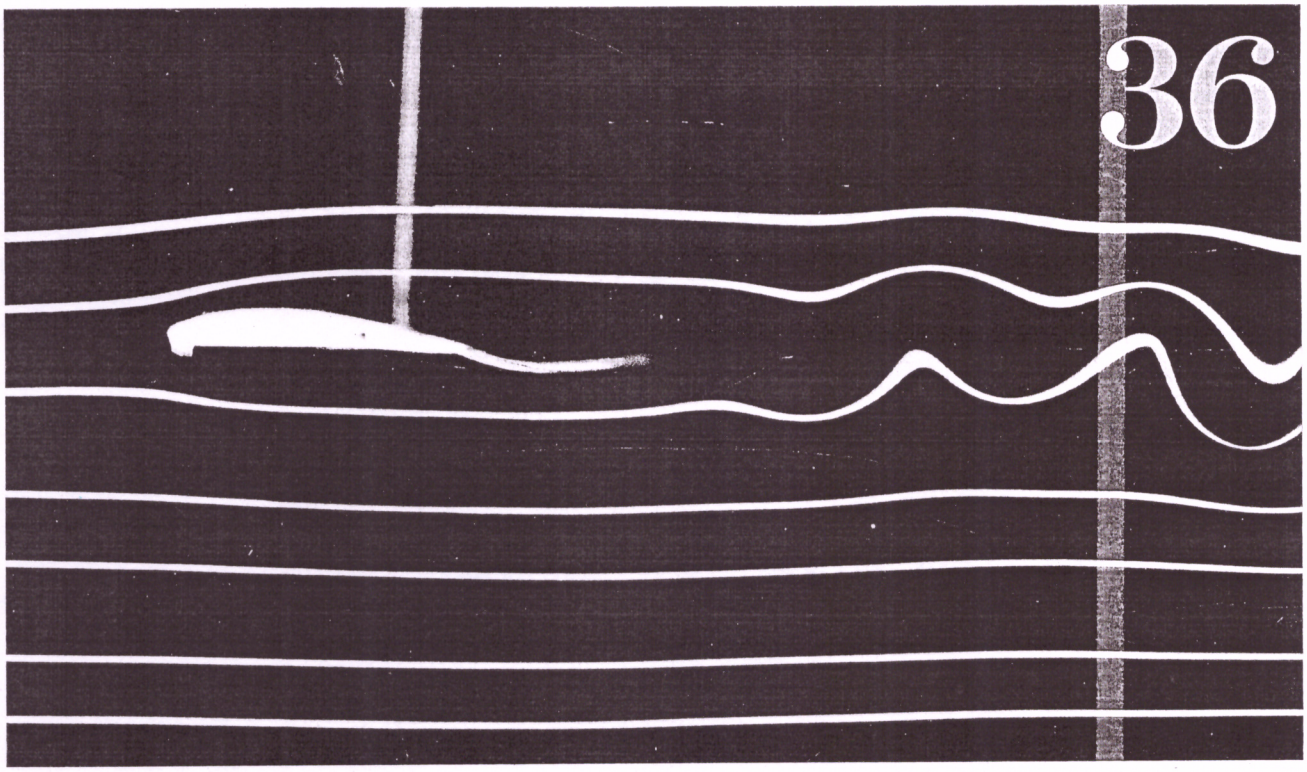
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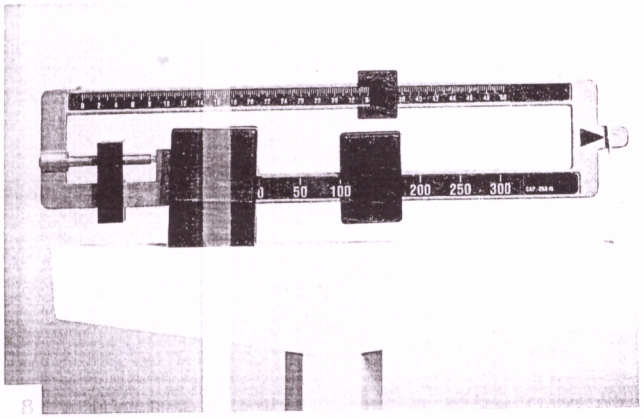
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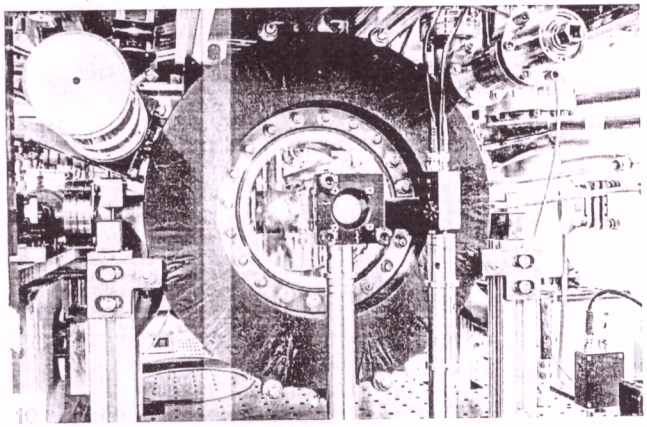
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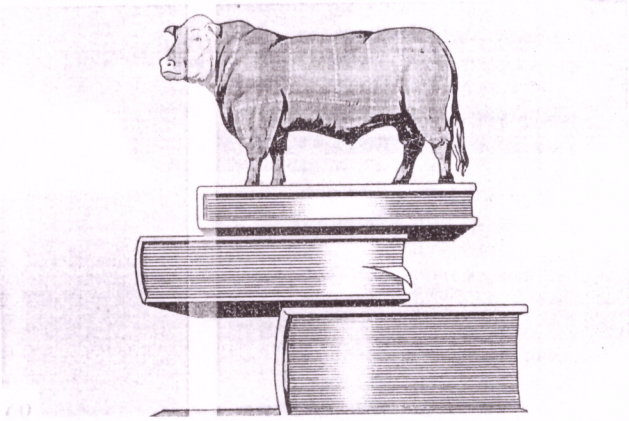
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Scientific American (ISSN 0036-8733), Volume 322, Number 2, February 2020, published monthly by Scientific American, a division of Nature America, Inc., 1 New York Plaza, Suite 4600, New York, N.Y. 10004-1562. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 40012504. Canadian BN No. 127387652RT; TVQ1218059275 TQ0001. Publication Mail Agreement #40012504. Return undeliverable mail to Scientific American, P.O. Box 819, Stn Main, Markham, ON L3P 8A2. **Individual Subscription rates:** 1 year $49.99 (USD), Canada $59.99 (USD), International $69.99 (USD). **Institutional Subscription rates:** Schools and Public Libraries: 1 year $84 (USD), Canada $89 (USD), International $96 (USD). Businesses and Colleges/Universities: 1 year $399 (USD), Canada $405 (USD), International $411 (USD). Postmaster: Send address changes to Scientific American, Box 3187, Harlan, Iowa 51537. **Reprints inquiries: (212) 451-8415. To request single copies or back issues, call (800) 333-1199. Subscription inquiries: U.S. and Canada (800) 333-1199; other (515) 248-7684. Send e-mail to scacustserv@cdsfulfillment.com.**

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An International Journal of Research and Studies

Website: http://www.elsevier.com/locate/tate/

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ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

0742-051X(201905)81;1-G

ISSN 0742-051X
81 1–112 (2019)

Printed by CPI Antony Rowe, Pegasus Way, Melksham, UK

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Website: http://www.elsevier.com/locate/tate/

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0742-051X(201906)82;1-C

ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

ISSN 0742-051X
82 1–164 (2019)

Printed by CPI Antony Rowe, Pegasus Way, Melksham, UK

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An International Journal of Research and Studies

Website: http://www.elsevier.com/locate/tate/

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ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

0742-051X(201908)84;1-4

ISSN 0742-051X
84 1–150 (2019)

Printed by CPI Antony Rowe, Pegasus Way, Melksham, UK

Vol. 88 Feb. 2020

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An International Journal of Research and Studies

Website: http://www.elsevier.com/locate/tate/

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0742-051X(202002)88;1-7

ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

ISSN 0742-051X
88 (2020)

Printed by CPI Antony Rowe, Pegasus Way, Melksham, UK

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ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

0742-051X(202003)89;1-3

ISSN 0742-051X
89 (2020)

Printed by CPI Antony Rowe, Pegasus Way, Melksham, UK

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Website: http://www.elsevier.com/locate/tate/

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ELSEVIER

ISSN 0742-051X
89 (2020)

Rs. 25.00
ISSN- 0566-2257

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Association of Indian Universities
Vol. 58 • No. 02 • January 13-19, 2020

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Subscription is payable in advance by Bank Draft/MO only in favour of Association of Indian Universities, New Delhi.

Opinions expressed in the articles are those of the contributors and do not necessarily reflect the views and policies of the Association.

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Fascinating Journey of Women Empowerment in India: With Special Reference to National Movement

K Murugan* and K Jothi Sivagnanam**

In Indian society, man and woman are considered as two wheels of life, though woman has to play a multi-faceted role in the form of mother, wife, sister and a source of inspiration. Mahatma Gandhi said that woman is the companion of man, gifted with equal mental capacities. She has the right to participate in every detail in the activities of man. She has an equal right of freedom and liberty with him. She is entitled to a supreme place in her own sphere of activity as man is in his. This ought to be the natural condition of things and not as a result only of learning to read and write. By sheer force of a vicious custom, even the most ignorant and worthless men have been enjoying superiority over women, which they do not deserve and ought not to have. Many of our movements failed to achieve success because of the condition of our women. The position of women in a society is the true index of its cultural and spiritual attainments. In the Vedic age, women enjoyed a high position in Indian society.

They had full freedom for spiritual progress and intellectual development. The Aryans who were engaged in the arduous task of political expansion desired cooperation of their women in every walk of life. Though it is said that women enjoyed higher status, there is a scope to evaluate it whether they had authority and freedom to that extent the men had at the time.

We find references in Vedic literature to a ritual recommended for ensuring the birth of a scholarly daughter. Daughters like sons were initiated into Vedic studies and had to lead a life devoted to learning, self-control and discipline. Many women rose to become Vedic Scholars, debater's poets and teachers. Some remained unmarried for a life-long pursuit of knowledge and were known as *Bramanavadinis*. In Mahabharata, women have been praised as light of the house, mothers of the house, mothers of the Universe and supporters of the earth and its forests. During the Vedic and post-Vedic period also, women actively took part in the intellectual and social life of the country. The Barhut sculptures represent skilful horsewomen in the army.

Status of Women in Ancient Period

Patanjali mentions the spear bearers (*Saktikirs*) and Megasthenes speaks of Chandragupta's bodyguard of Amazanian women. Kautilya mentions women archers. Boys and girls were educated together in the houses as well as in the forest Universities of India. Atreyi studied under Valmiki along with Lava and Kusa, the sons of Rama. The status

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19/2/2020

Rs. 25.00
ISSN- 0566-2257

UNIVERSITY NEWS

A Weekly Journal of Higher Education

Association of Indian Universities
Vol. 58 • No. 03 • January 20-26, 2020

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UNIVERSITY NEWS

Vol. 58 **January 20-26,**
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Price **Rs. 25.00**

A Weekly Journal of Higher Education Published by the Association of Indian Universities

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Subscription is payable in advance by Bank Draft/MO only in favour of Association of Indian Universities, New Delhi.

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The Opening of the Indian Mind

Hema Raghavan*

University News is to be applauded for its timely and much needed decision to bring forth this special issue on Safe Campus. The recent happenings in three of our premier universities have released the trigger of (un)safety alarm in our university campuses. This article is not an investigative article about who triggered the violence in JNU and earlier in Jamia and Aligarh Muslim University campuses. It is not about Right vs Left vs Centre, but taking the cue from the well known journalist, Rajdeep Sardesai, this article is about right and wrong in our campuses which have been in thrall to a pathological urge to violence. To be more accurate, the present scenario in our university campuses has seen the waning of right and the waxing of wrong to make them unsafe campuses. Indian universities today are hot and bothered about 'How safe are our university Campuses - a rhetorical question with a built in answer that they are no longer safe.

What is meant by a safe campus? The phrase 'safe campus' refers to a college campus that is free of intellectual prejudices, ideological bias, conflicts, criticism besides potentially threatening actions, ideas, or conversations. In simpler terms, Safe campus is the responsibility of the university to provide a safe environment for its students to learn and live. I have privileged 'learn' over 'live' because universities' first and core duty is to make students learn to live. It is a fact that the best years of one's life are the years spent in the university where a student and a teacher get rejuvenated intellectually and emotionally. It is not just academic learning, but learning to live with others whose views, thoughts, words, actions, interests and outlook are similar to as well as different from one's own . Thus the term safe space gathers importance in the university campuses -to provide an open and unfettered space to learn and grow up as a responsible adult.

It is worth looking into the reference to 'Safe space' made by the University of Chicago in the statement given to the fresh batch of students at the start of the Fall programme. Dean of Students, John Ellison in a welcome letter sent to all the first-year students wrote :"Our commitment to academic freedom means that we do not support so-called trigger warnings, we do not cancel invited speakers because their topics might prove controversial, and we do not condone the creation of intellectual 'safe spaces' where individuals can retreat from ideas and perspectives at odds with their own." The letter succinctly defines the campus environment as safe space where students can learn to live with everyone with whom they agree and with others they do not agree. In the charged atmosphere prevailing in our universities the term 'safe space' gathers importance in the university campuses.

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