places has long been known!

The true cause of the behavior of the a compass needle has been a field for speculation and study ever since its peculiar behavior was observed and a few students had up to the time of. Gauss proposed and laboriously worked out ingenious theories to explain the phe nomena observed The publication of Gauss' great work in 1838, however marked a great advance and gave a new and powerful impulse to the subject. The Magnetic Union, formed in the Third decade of the present century, chiefly owing to the researches of Gauss, caused the establishment in various parts of the world of magnetic observationes, for inded and maintained y various governments. Of those so founded in the forties, several have maritained a series of almost uninterrupted observation to this day. This period of 60 years has seen progress in our knowledge of terrestrial magnetism, but wit with

If free 5 more in any direction would not him the horizon; is also an old discourge having here Gauss protioned and laboramly worked out

Geogre, Mag. any spoch-marking event. A wast number of observations have been accumulated, the 24 constants in Yours' fundamental formula have been more accurate strawed determined, and a number of minor phenomena observed and explained, but the subject is far from being exhausted. The modern applications of electricity to practical affairs is not without its effect whom the subject of letrestrial magnetism.

Is not the journal before us, then, to mark a new spoek in our knowledge of this subject? It seems strange that, when almost every branch of science has long had its special journal or organ; we should have waited almost for the dawn of the twentieth century for the first number of the first journal devoted to a matter of such great practical moment and for four centuries known by all civilized men to be important.

We welcome this journal, then, as a needed one, rightly conceived and giving promise of usefulness. It enters, and enters under favorable ausplices, a field not hitherto occupied by any scientitic journal. The names of the editors, the laborator and university from which it comes all combine to promise excellent results. It will be straigs indeed if distinct gains in human knowledge

observed intermined and a amought of owner par the priote jointmal devoted it is notited to their so not result from this enterprise.

The editor, Dr. Bauer, Though a young man, is a most enthusiastic student in his chosen field. After several years of service in the United States Coast and Geodetic Survey, devoted chiefly to magnetic computation, he went to Europe and devoted his energies to magnetic Studies. His doctor's degree was obtained last year, as the outcome of these studies. To him more than to any other belongs the credit of founding the first journal given wholly to the subject of terrestrial magnetism, and patriotic Americans will perhaps derive some satisfaction from the fact that the Journal was founded in the United States. To the editor and his associates and to the University of Chicago we tender our Congratulations and hope for them a large measure of success.

ing the fixed journal given wholl to

[From "American Journal of Science", Fourth Series Vol. I, No. 2, Feb 1896, pp. 141 + 142.]

14. Verrestrial Magnetism. An international quarterly journal published under the austices of the Ryerson Physical Laboratory, A. A. Michelson, Director. Edited by L. a. Baner. Vol. I. No. 1. Chicago (The University of Chicago Press, Two dollars a year). This new journal is to be devoted exclusively to terrestrial magnetism and its allied subjects, as earth currents, auroras, almos pheric electricity ite. It thus fills a place never occupied before and it may be safely predicted that under The able editorship of Dr. L.a. Bauer, who has himself made notable original contributions to terrestrial magnetism, it will do much to stimulate research and observations in the important but difficult branch of science. The editor-in-chief will be aided by a large number of associates both in this country and abroad. The opening mumber contains the following articles (pp. 1-28): On electric currents induced by votating magnets and their application to some phenomena of terrestral maynetism, A. Schuster, die Vertheilung des erdmagnetwichen Potintials in Begug auf beliebige Durch-

and the same of th Tyrister Extend by of a. Bruss " H. I. 16 1. no evite curtifute, amoras, plinosphenic decre messer der. Erde, A. Schmidt, Gotha; Halley's earliest equal variation chart, reproduced in fac-simile for the first time from a photograph furnished by Thos. Ward, Esq., of the chart in his possession, text by L. a. Baner. The remainder of the number, pp. 28-54, is accupied by letters to the exitors, notes, reviews, Etc.

From "The Dial", Feb. 1, 1896.

The progress of specialization in physical science has a striking illustration in the new est periodical publication of the University of Chicago. It is a quarterly devoted to "Terrestrial Magnetism and the subject gives it a title. It is published under the ausfrices of the Ryerson Physical Laboratory, with much learned American med European collaboration.

From the Nation, Jan. 30, 96.

Terrestrial Magnetism, an international quarterly journal emanating from the Ryerson Physical Laboratory of the University of Chicago. All languages capable of being printed in Roman letter will be admitted. No journal of the kind is now in existence.

The Diale hart were more was an mass a structury illustration in the occurate periodice [From "Nature", No. 1366, Vol. 53, January 2, 1896, pp. 203 + 204.]

Another periodical, the first number of which will appear in America this month, is entitled Terrestrial Magnetism, an international quarterly journal to be published under the auspices of the Ryerson Physical Laboratory, University of Chicago, and edited by Dr. L. a. Baner, with the co-operation of numerous eminent workers in terrestoral physics in many parts of the world. The journal will be devoted exclusively to terrestrial magnetism, and its allied subjects, such as earth currents, auroras, atmospheric electricity, vs. The magnetic needle has become such a promising instrument of research, not only in terrestrial but also in cosmical physics, that the journals which is to be devoted to phenomena connected with it will appeal to a large class of. mivestigators. To quote from the circular heraldmy the new publication: No other mechanical means is so surely and so completely recording the physical history of terrestrial and cosmical changes as the self-registering magnetographs of our magnetic abservatories, whereby the fitful tremors of the delicately suspended magnetic needle are being indelibly

edited by In I. d. Bauer, with the co-survation of

fixed on the sensitised sheet. On that paper, as Maxwell eloquently expressed it, the never resting heart of the earth is now tracing in telegraphic symbols, which will one day be interpreted, a record of its fullsations and its flutterings, as well as of that slow but mighty working [the secular variation] which warms us that we must not suppose that the inner history of our planet is ended.

Vol. XVII. No. 2, Feb., 1896.

Jerrestrial Magnetism is the name of a new international quarterly journal published under the anspices of the Ryerson physical laboratory of the University of Chicago. L. a. Baner is editor, and he had the cooperation of therty-four associates in this country and abroad. The journal is devoted exclusively to terrestrial magnetism and its allied subjects, such as earth currents, auroras, atmospheric electricity, etc. The first number was resided in January and contains fifty four pages.

. protection to secretarist occión les autopares de May. which comes us that we must not suppose that The Journal of Geology, Vol. TK, No. 1, Jan - Feb. 76 (7)

Editional No. 1 ..

Geologists who are interested in the more. obscure problems of the physics of the earth will welcome with peculiar gratification the appeal ance of a monographic periodical devoted to a of the most neglected phases of the earth's phenomena, Jerrestral Magnetism, un International Quarterly Journal, published under the auspices of the Ryerson Physical Laboratory of the University of Chicago. The journal is edited Dr. L. a. Bawer, with the cooheration of thering four eminent students of terrestrial magnet: ism, representing system countries, among which the European states naturally fifedominate, but China, Java, and Australia appear as representatives of the antipodes. The magazine will perform a valuable service in buying together matter which which is now so widely scattered as to be difficult of assess even to specialists, and quite beyond the reach of most peologists.

Without doubt it will also from to the organization of the matter and the evolution of the science. Not a few geologisto have looked with some measure of hohe to terrestral magnetism for a valuable contribution to the dark problems of the earth s interior. He have long felt that there should be discoverable some medium which could be operated whom by some. inventible device in such a way as to serve as a stethoscope, so to speak, to declare the conditions and the changes in the heart of the earth. Magnetism is one of the suggested media, and even if it shall not prove an agency of any great moment in itself, it may reveal conditions of the interior now quite hidden from us. The editoral greeting frestmently quotes Maxwell's eloquent woodsreferring to the sensitized sheet of the self-registering magnetograph - On that paper, the never restring heart of the earth is now tracing in telegraphic symbols which will one day be interfiteted, a record of its pulsatrous and its flutterings, as well as of that slow but mighty working [the secular variation] which warns us that we must not suffere articles of weighty interest to geologisto. T.C.C. (Chamber

the server . Not a four georgial has Those is the dark posterns of the Enish. He have love felt that Thereinsentible device in such a way so to he constitues and he changes in the heart of the earth. Magnetinin is one of the suggestied with of the carth is now bearing in the madeline agenties

musm

THE PLAIN CITIZENS.

A politico-social organization, having for its object the solution of a grave, national problem, namely, How to Abolish Compulsory Poverty.

HEAD OFFICE

OF

GROUP NO. 1 OF THE ACTIVE MEMBERS,

128 Washington Building,

1 BROADWAY,

All letters should be addressed to Dr. Stephen H. Emmens.

New York City, N. Y., March 21st, 1896.

President W. R. Harper D.D.

University of Chicago.

Dear Sir.

Mr. Hugo A. Strong has shown me your letter to him of the 19th Inst; and, on behalf of the Plain Citizens, I have to thank you for your cordial expression of sympathy with our movement.

Early next month we shall issue, under themtitle of "The Sixteenth Amendment" a complete draft of the constitutional change we suggest accompanied by a presentation of arguments and facts in support of the same. This will, I think, convince you that what we propose is both proper and feasible.

I enclose herewith a document which will, perhaps, prove interesting to you and your Faculty and some of your advanced students.

Your's Faithfully,

THE PLAIN CITIZENS.

A politico-social econization, having for its object the solution of a care, regional problem, radially flow to Abeliah Computeurs Payerry

GROUP NO, 1 OF THE ACTIVE MEMBERS.

OF STREET IN CORRESPONDED

New York City, N. Y. March 21st, 1800.

President W. R. Harper D.D.

University of Chicago.

Deer Sir.

Mr. Hugo A. Strong has shown me your letter to him of the lath Inst; and, on behalf of the Plain Citizens, I have to thank you for our cordial expression of sympathy with our movement.

ent" to althment mebnu , eusel fishs ow dinost from virel Saxteenth Amendment" a complete draft of the constitutional change we suggest accompanied by a presentation of arguments and facts in support of the same. This will, I think, convince you that what where propose is .e.Idiasel bas regord afod

I enclose herewith a document which will, perhaps, prove interesting to you and your Faculty and some of your advanced students.

Your's Faithfully.

ONE THOUSAND DOLLARS IN PRIZES.

The PLAIN CITIZENS offer five prizes, of Two Hundred Dollars each, for the five best essays that may be submitted to them on the following subjects, namely:

- 1. A Statistical Essay, showing the "National Cost of Compulsory Poverty in the United States."
- 2. An Essay on the "Needlessness of Taxation in the United States," showing what are the resources of the Federal and State Governments in lands, minerals, water-power and other forms of wealth, and how the same may best be utilized for the benefit of the people at large.
- 3. An Essay on "Non-Competitive Government Production," showing, in practical detail, how a Federal Department of Labor can best provide employment for the compulsorily idle poor of the United States, without cost to the nation or undue interference with private enterprise.
- 4. An Essay on "The Rousing of the Nation," showing how popular enthusiasm may be most speedily awakened in favor of the abolition of compulsory poverty.
- 5. An Essay on the "Philosophy of Dumbness," showing why Ministers of Religion, University Professors, Politicians, Mugwumps, Socialists, Salvation Soldiers, Christian Endeavorers and Leaders of Trades Unions refrain from pronouncing themselves on the subject of a national attempt to abolish compulsory poverty.

The essays must be typewritten, on one side of the paper only; and no essay must contain less than 15,000 or more than 20,000 words. Figures and tables will be reckoned as equivalent to the number of words that would be required for the same space.

All essays presented for competition must be sent to Group 1 of the Plain Citizens, at 1 Broadway, New York City, not later than the 31st of May next.

Each essay must be signed by some distinguishing word or words, and must be accompanied by a sealed envelope bearing the same word or words on the outside, and containing the writer's name and address. Care must be taken to avoid all statements or allusions that may indicate the authorship of an essay prior to the adjudication.

Each competitor has the privilege of competing for all or any number of the prizes offered, and may submit one or more essays accordingly.

In judging the essays, regard will be had to literary merit as well as to the marshalling of facts, figures and arguments.

The adjudication will be made by Dr. Stephen H. Emmens on behalf of the PLAIN CITIZENS, and will be announced, both by circular to all the competitors and by public advertisement, prior to the 31st of July next. The prizes will be paid immediately after such announcement.

The successful essays, and the right of publishing the same, will become the property of Dr. Stephen H. Emmens, as representing the Plain Citizens.

The unsuccessful competitors will have the right of appeal to any three persons of literary eminence whom they may select, and who may be willing to act without fee; and if such persons be unanimously and reasonably of opinion that any of the prizes should have been awarded to any of the unsuccessful essays, the Plain Citizens will give duplicate prizes accordingly.

Signed, on behalf of the PLAIN CITIZENS,

BROADWAY,
New York City, N. Y.

STEPHEN H. EMMENS.

And a subject to the subject of the

ONE THOUSAND DOLLARS IN PRIZES.

The PLAIN CITIZENS offer five prizes, of Two Hundred Dollars each, for the five best essays that may be submitted to them on the following subjects, namely:

- 1. A Statistical Essay, showing the "National Cost of Compulsory Poverty in the United States."
- 2. An Essay on the "Needlessness of Taxation in the United States," showing what are the resources of the Federal and State Governments in lands, minerals, water-power and other forms of wealth, and how the same may best be utilized for the benefit of the people at large.
- 3. An Essay on "Non-Competitive Government Production," showing, in practical detail, how a Federal Department of Labor can best provide employment for the compulsorily idle poor of the United States, without cost to the nation or undue interference with private enterprise.
- 4. An Essay on "The Rousing of the Nation," showing how popular enthusiasm may be most speedily awakened in favor of the abolition of compulsory poverty.
- 5. An Essay on the "Philosophy of Dumbness," showing why Ministers of Religion, University Professors, Politicians, Mugwumps, Socialists, Salvation Soldiers, Christian Endeavorers and Leaders of Trades Unions refrain from pronouncing themselves on the subject of a national attempt to abolish compulsory poverty.

The essays must be typewritten, on one side of the paper only; and no essay must contain less than 15,000 or more than 20,000 words. Figures and tables will be reckoned as equivalent to the number of words that would be required for the same space.

All essays presented for competition must be sent to Group I of the PLAIN CITIZENS, at I Broadway, New York City, not later than the 31st of May next.

Each essay must be signed by some distinguishing word or words, and must be accompanied by a sealed envelope bearing the same word or words on the outside, and containing the writer's name and address. Care must be taken to avoid all statements or allusions that may indicate the authorship of an essay prior to the adjudication.

Each competitor has the privilege of competing for all or any number of the prizes offered, and may submit one or more essays accordingly.

In judging the essays, regard will be had to literary merit as well as to the marshalling of facts, figures and arguments.

The adjudication will be made by Dr. Stephen H. Emmens on behalf of the PLAIN CITIZENS, and will be announced, both by circular to all the competitors and by public advertisement, prior to the 31st of July next. The prizes will be paid immediately after such announcement.

The successful essays, and the right of publishing the same, will become the property of Dr. Stephen H. Emmens, as representing the Plain CITIZENS.

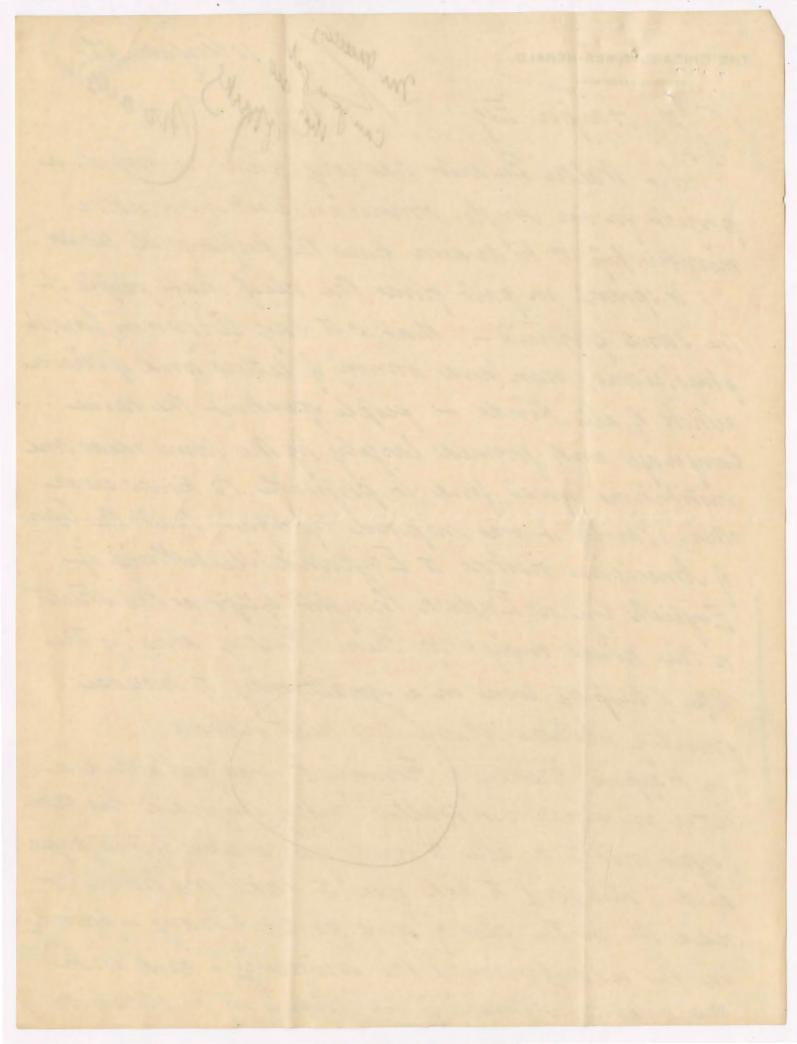
The unsuccessful competitors will have the right of appeal to any three persons of literary eminence whom they may select, and who may be willing to act without fee; and if such persons be unanimously and reasonably of opinion that any of the prizes should have been awarded to any of the unsuccessful essays, the Plain Citizens will give duplicate prizes accordingly.

Signed, on behalf of the PLAIN CITIZENS,

I Broadway, New York City, N. Y. STEPHEN H. EMMENS.

el 30

Den for the of the Mount of the THE CHICAGO TIMES-HERALD. Harper Esq. Walter Berant has long had be mind a project for an Anglo. American clut in London membership to be as own from the professional classes. In It sprang in part from the belief that people of The same proverite - that is to vay clergy men, langer physicians, men (and women) of letters and of science ashist of all kinds - people speaking the same language and foremed largely by the same ideas and institutions must find it propitable to know each other. Partly it was inspired by regul that the Cofin of American visitors to England see nothing of English life or English thought yelfor as the streets n me hotels may ihm them. Partly also by the nope of helping, wen in a small trong, to incurse prindly relations between two peat makins. In Harpiro Mukly of February of. may published a letter in which dir Kalter briefly ymfolded his plan. I refret not to be able to send you a copy of this paper and I am joing to ask you to take the north to rad it in the ples of any butter litrary - protate in the reading room of the minosity - and write me what you think of the Since its publication



Sir Walter Bus and has taken finther steps to carry out this plan. It is his desire and my mm, to as certain whether it recommends itself to Americans and what the myes they would suffert. I know no tetter may of finding out than inquiring the pinion of men whose words carry weight and fring Them as mide a publicity as possible in order to diet farther for om personal acquamtance in dondonprotatly under you independent of my such dut, but it is believed that you will be indy monthly m'n its arms and could make valuable suffertime. I have already received for in me on the Subject from mas. Norton Elist, Manney Slepen, Therene Rowerest, Thomas Wintwork Higginson, D. H. Brown ham and many others. These to receive yours, fully and helpfully expressed If mo timber the Horyall

