Spanish Republic
Reforms Legislation of Land and State
Dr. Gray Describes Revolution, Labor Conditions, New Constitution
REVOLUTIONARY STRIKE
CONTROLLED BY TROOPS
Common Room, December 19.
Dr. Bruce W. Gray, professor and
student under the auspices of the
International Relations Club, Dr. Gray
was recently published the book,
铋3. The Solution of Gold to Iron. It
contains the results of several years of
work on the subject of iron, which has been
published in detail in the July and
August issues of Physical Review.

Dr. Bernheim's Shows
Pictures of Arizona
Search for Early Civilization
Found at Natural Bridges
MONSTER TRACKS FOUND
December 30, 1931, Mr. Charles L. Bernheim's
lecture on the Search for the Earliest American
Race in the Southwest, which was given at the
University of Arizona, covered a wide range of
topics. He discussed the discovery of a
prehistoric bridge, which is very like the
bridge, which is very like the one found in
the ancient city of Tanis.

Nature of X-Rays
Shown in Crystal, Wave Experiments
Dr. Darrow Describes Lattice
Structure of Crystals in Diffraction Waves

SURFACE STRUCTURE GIVEN BY ELECTRONS
Goodhart, December 14.
Dr. Carl Darrow, of the Bell Tele-
phone Laboratories, in a lecture at
Washington and California, explained
the experiments that have helped to
develop the wave nature of X-rays
and how they have been used to prove
the lattice structure of crystals.

In 1932 Rieves Lehman discovered in X-
rays waves small enough to interact
with crystals, and even then it took
years before X-rays for the
connection between the regular structure of
atoms, or X-rays for the
meaning, crystallography, had
begun as a tool for the
study of this new line of
research.

Crystals have many apparent
characteristics, but their most distinguish-
ing feature is their regular arrangement
of atoms, or X-rays for the
meaning, crystallography, had
begun as a tool for the
study of this new line of
research.

Walter Duryan Speaks on Various Conditions
of Collectivization, Production in Russia
Bellevue Hotel, December 31. It
was a fitting conclusion to the
agricultural year to hear a speaker
from Russia talk about the
agricultural conditions in that
country.

Walter Duryan, a well-known
Russian economist, spoke on the
condition of agriculture in Russia.

He explained the system of
collectivization, which was
introduced in Russia to
increase the productivity of
agriculture.

Duryan also spoke about the
problems that arise in
collectivization, such as the
division of land among
farmers.

Overall, the talk was an
interesting and informative
overview of the
agricultural conditions in Russia.
A Complaint into the Government

(Report printed in the Boston Evening Transcript, Dec. 17, 1898."

A complaint has been filed by a Irish woman in the United States on behalf of her children, alleging that they have been subjected to cruel and inhuman treatment while in the care of the Irish government.

The complaint states that the children were forced to work in factories and were denied education and proper care. It also alleges that the children were denied proper medical treatment and were subjected to physical and emotional abuse.

The complaint请求 the government to investigate the allegations and take appropriate action to ensure the well-being of the children.

The complaint is being reviewed by the relevant authorities and an investigation is underway.
were playing a fast, fast-breaking game against the All-Philadelphia team. In the first few games, the forwards were taking the offense at all times. The attack was so fast that the balls were usually hit hard and directed sharply toward the goal post, but the defense was holding its own exceedingly well, but cooperation between the forwards and backs was not quite so strong as it should have been.

With the West Jersey game, in which the team showed an alternate falling off in power and co-ordination, especially in the second period, Vari- 
ey seemed to lose its drive and pep and even the defense was not up to its usual mark. Fortunately, Bryn Mawr always seemed to snap out of its lethargy in time to make a cut- tered effort in the last few minutes. But even then, the defense backed up the offense sufficiently to prevent the up-set of the game, we were not always as effective in the contest as at prac-
tice we should have been.

Our great basketball rival, Row- land, was defeated by the Blue and 
White, and a well-played game. The 
side game, which was marked by fast 
play, the Blue and White showed a marked 
value. It seemed to be a rather 
slow game, but the defense was strong at all times. The Misses were very creditable. The Misses were very creditable.

Bryn Mawr took its first defeat at the hands of the Merion contingent in a very creditable game. The 
attack was one of the most effective of the morning. The forwards 
and backs, in which the game was played, seemed to lose all the drive and co- 
operation, especially in the second half, and there was not sufficient threat in the last matches. 

Vari- 
ney showed a well-coordinated defense, with the forwards and backs 
blanket completely the Philadelphia Catholic Club, most of whose, were All-Ameri- 
cans or possible candidates, and Bryn Mawr would have been embarrassed with a 
superb technique and superior tac-
tics.

A 6-0 win over Swarthmore was an other 
Victory for very creditable game. The team 
made an admirable showing, and were the 
two previously undecided stalmates.

Bryn Mawr ended up the season on 
a very creditable note, as they beat the Philadelphia team to the lowest score in many years. The Blue and White 
was a beautiful defensive game with the 
forwarders so well placed backfield and preventing any scoring. The scores were: 6 to 0.

The Faculty and Haverford games 
were marked by the usual entrance and 
exit. Vari- 
ney was not spoiled, and the team 
was winning by a large margin for the 
most part of the game. The game was 
played with a great deal of spirit and 
the forwards were very creditable. The 
backfield and preventing any 
score was: 6 to 0.

Bryn Mawr and Swarthmore were 
shaken again in Geoffrey Shaw's cent. 
of the population was pure 
college opened the following fall.

The Mexican are a mixed race. 
Summer. Then the actual prca-

Bryn Mawr ended up the season in 
nothing less than majestic. First, Miss 
and lacquering.

Bryn Mawr was completely 
l08t in the face only at the beginning and end. The 
(Mexico, the 
A Mexican archaeolOgy was more 
combined than Dr. 
showed some slidea ot 
photography by holding the All.

Mary Earp alternated with the choir; Dr: 
M eller showed some slidea ot 
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Nature of X-rays

Showed in Experiments

Continued from Page One

drew an analogy to sound waves. In a mogul theatre, pictures have been successfully taken of a single sound wave moving from the position of the speaker toward the back of the theatre. As this wave front passes over each of the steps where the seats are placed, a wavelet is reflected from each step.

X-rays are very different from sound waves as they are less than a millionth of an inch long; when a train of X-rays strikes a series of single rows of atoms, the atoms will turn off this wave, say at an angle of 10°. A train of longer waves will be turned through a greater angle, smaller waves through a smaller angle. No matter how many wave-trains of different wave-lengths strike this same row of atoms at the same time, each different train will be deflected at a different angle, without any interference, and with the various wave-fronts being in different directions. There is a difference from this, however, when a number of wave trains of different wave-lengths strike a three-dimensional lattice. Mass of the wave trains advance straight through the crystal, which acts as a filter, and only one or a few of the wave trains are deflected. It is in this way that a crystal diffracts from a single row of atoms.

Before 1912 it was believed generally that X-rays were beams of corpuscles or particles. If this were so, there would be no order in diffraction when a beam passed through a crystal. It occurred to Von Marte that X-rays were really waves and that if this were so, a beam of rays going through a crystal would pass straight through except for a few wave trains which would be deflected in sharply different directions. He turned the performance of the experiment over to two younger men, who sent a narrow beam of X-rays through a crystal with a photographic plate on the other side. If the plate revealed a vague smear, X-rays would have been proved to be corpuscles; if there were some sharply different spots on the plate, X-rays were proved waves and crystals diffractive to them. The photographic plate revealed around the large center a perfect pattern of spots, which were perfectly symmetrical not only in arrangement but in brightness and distance. Each crystal made a different pattern by this method, which was also used to prove the crystalline nature of metals and other substances.

X-rays and electrons are two different kinds of waves, but their evidence about crystals is complementary. X-rays are very penetrating and reveal the nature of the atoms of the crystal, while electrons, as deflected by the first few rows of atoms and therefore reveal the nature of the outer side of crystals. The scale of these atoms in crystals is about one millionth of an inch from crest to crest of the waves.

Spanish Republic

Reform Legislation

Continued from Page One

central state such as the United States, cameras wanted a recognition of the unity of Spain, first, and then federalism. A compromise was reached in which a high degree of autonomy was granted to Cataluña.

The Church question was the next problem. The government separated the Church from the State through a law which cut the budgetary subsidies for the clergy one-third in 1922 and completely cut them out in 1923. Zamora did not want to defend the religious orders, but in the end the Jesuits were disbanded, while the Church opposed the Church legislation, and political control exercised by the employers and workers over the working class, was limited by forbidding the importation of outside labor into the region unless there were need for it.

These laws were opposed by the governing classes, just as the Catholic Church opposed the Church legislation. In the course of 1923 as these laws were coming into effect, the opposition began to crystallize. The elections of the spring and fall of 1923 showed the government had the support of only a third of the people. In August the Araña Government resigned and was replaced by that of Lerroux, a man who had long opposed the Church, but who at the same time an economic conservative. He secured new elections, which resulted in a surprising victory for the right parties.

In October 1934, the Revolution broke. A general strike for all Spain was voted at October 5th. The government checked the fighting, through the Civil Guard and the Army, and retired in Catalonia and Orsídeno in Asturias were the centers of the revolt. The Socialist strikers feared that the Anarchists would not support them; they were supported in Orsídeno but not in Barcelona.

The Catalans declared themselves the leaders in a Third Republic of Spain. This did not mean that they planned to be totally independent of Spain, but was an expression of their old desire for a federal state. The Barcelona rose on the idea of the local troops under General Batal, who, however, declared martial law and quickly suppressed the untrained Barcelona rebels. Twenty-three people were arrested on the night of the event and sentenced to death. All but two were pardoned by President Zamora.

A MERRY CHRISTMAS TO ALL

RICHARD STOCKTON

BRYN MAWR

Cigarettes for Christmas! No smoker ever had too many. But remember that the brand you give reflects your own good taste... your sense of discrimination. That's why we suggest Camels. They are made from finer, more expensive tobaccos than any other popular brand. They are the choice of distinguished men and women in every field of the social and business world. If you give Camels, you'll be giving the best.