MANNING, S. C., WEDNESDAY, JANUARY 26, 1916.

BOTH HOUSES OF GENERAL AS-SEMBLY HAVE BEEN BUSY DURING WEEK.

viding Chaingang Sentence Without Alternative for Violators.

Woman Suffrage Gains. eral assembly by a vote of 61 to 51 and six were injured. on a joint resolution proposing a conthe question of votes for women has been presented seriously and fought for determinedly on the floor of the given out here, follows: house. Some marvaled at its strength lower house. Suffragists express grat ward. ification at the strength their cause

School Law Good Enough. Considering that the present operation of the local option compulsory by 2 a. m. school attendance law is sufficient for the needs and purses of South Carolina, the house killed a bill by Mr. Harper to place the question before jured." the people of the state in the next general election, the county being the unit. The arguments against the bill were based on the inexpediency of counted by any of the speakers, some after noon. of whom, however, favored the proposed measure to the end that compulsory education be statewide at an our naval and military machines. earlier date that by the operation of the present statute.

Rural Credits. A majority favorable report was received from the finance committee in the senate on the rural credits-bill, introduced by Senator Sherard of Anderson. Senator Christensen reported for the majority, with the minority unfavorable report signed by Senator Stuckey of Lee county. By the provisions of the bill, the state would float bonds to the amount of \$10,000 ary, were executed in the cemetery at 000 to be extended as aid in purchase Juarez.

ted to the people. Senator DuRant of Clarendon introduced a bill providing for an amend- rico. ment to the constitution to change the time of meeting of the general assembly. The date proposed is the fourth Tuesday in July instead of the second Tuesday in January.

Work on the appropriations bill is progressing at a rapid pace. The members of the house ways and means committee and the senate finance committee are using every effort to complete consideration of all sections of the bill. J. T. Liles, chairman of the ways and means committee, said that it was possible the bill would be ready for introduction in the house by February 1.

Public Printing. Bills embodying recommendations of house and senate committees to in- Lane were severely shaken up vestigate the public printing were introduced in both branches general assembly. The two measures in chief are identical in their terms. They provide for the erection by the legislature of a joint committee on printing, in which shall be vested control of "all the public printing, binding, lithoraphing and engraving for the state or any department of the state government."

"Safety First."

Discussions arose in the house over the adoption of a recommendation by the rules committee, amending rule 58 so that reports of committees of free conference shall be printed in the journal on request of ten members and lie over for consideration on the next legislative day... The amended rule was proposed by Mr. Mower, who said that the object is to assure deliberation one the most important report on a bill. Mr. Graycon, objecting, called attention to the fact that the rule would probably lengthen the session of the legislature and that the reports of committee on free conference were usually the best that could be done for a bill. Mr. Warren, chairman of the committee on rules, said that the amended rule would expedite the business of the house. The rule was adopted. Mr. Toole's bill, providing for the teaching of agriculture in schools, received an unfavorable report from the committee on education.

The senate has confirmed the folburg. No action has yet been taken the finance committee. on the nomination of Judge J. T. John-

Remodeling of the Columbia union its third reading in the senate, public station has been begun and the work weighers of farm products shall be will be progressed as quickly as is ex- appointed in towns of 5,000 inhabipedient. Tearing away and other pre- tants or more, upon petition of as liminary steps are now being taken. many as 50 freeholders. Such public At a recent meeting of the Union Sta- weighers are to be appointed by the tion Company of Columbia, it was decided to make improvements costing the town council, and are to be placed between \$50,000 and \$100,000.

Coca Leaves. Coca, from the leaves of which cocaine is produced, was known among the Incas as the "divine plant" long before the discovery of America.

A Matter of Figures. Lobbyist-May I submit some figures in support of my contention? Senator -Well, there'll have to be at least four figures .- Puck.

MUCH WORK DONE AEROPLANES MAKE UNION ENDORSES BY LAWMAKERS TWO SUNDAY VISITS

HOSTILE AIRCRAFT DROPS MANY BOMBS ON BRITISH COASTS.

But Some Private Property Destroyed .- Some Fires Started.

London.-The east coast of Kent lower house of South Carolina's gen | nine bombs. One person was killed Farmers' Union stressed the necessity

raiders escaped.

An official account of the first raid,

"The war office announces that, in the Palmetto State, others were taking advantage of the bright moonsurprised that it failed to receive a light, a hostile aeroplane visited the presided at the sessions. majority vote, while some were heard east coast of Ken at 1 o'clock in the to predict that it would receive the morning. After dropping nine bombs necessary 83 affirmative votes in the in rapid succession, it made off sea-

"No naval or military damage was done, but there was some damage to The Citrus Growers' association of private property. Incendiary bombs caused fires, which were extinguished

"The following casualties occurred: man and three children slightly in-

The war office announcement concerning the second attack says:

"Following the aerial attack on the east coast of Lent early in the mornchanging the existing law this year; ing hostile seaplanes made a second the value of education was not dis- attack upon the same locality shortly

"After coming under a heavy fire the raiders disappeared, pursued by "No casualties have been reported."

MURDERERS ARE EXECUTED.

Duran Brothers Died, Cursing Americans, in Cometery.

El Paso, Texas .- Bernardo and Fedrico Duran, the Mexican cattle thieves, condemned to die by the Poe. Carranza authorities for the killing of Bert Akers at San Lorenzo, a few miles below the international bound-

The issue is to be submit The Duran brothers Americans. Bernardo appealed for mercy on behalf of his brother, Fed-

"It is unjust to kill two of us for one American," he said. "It is giving two eyes for one tooth. I am willing to die, because I killed the gringo, but my brother ought to be

allowed to live." The bullets of the firing squad killed Fedrico, but Bernardo was still conscious after he fell and the officers commanding the fring squad gave him the "mercy shot" through

The bodies of both Mexicans were buried immediately. Bill's

Secretary Lane's Horses Ran. Washington.-Secretary Lane the department of interior and Mrs the horses to a carriage in which they were riding smashed into a lamp post and dragged it Half a down a sidewalk. The runaway ended when the horses became entangled in the harness and fell.

Steamer Sunk."

steamer Pollentia which has been reported in distress about 700 miles off Cape Race foundered according to a wireless message received here. All on board were rescued.

Miss Wilson Leaves Hospital. Philadelphia.-Miss Margaret Wilson, daughter of the president, left the hospital here where on January 13 she underwent an operation for the removal of adenoids and both tonsils.

Goethals on Way Home. Panama.-Gov. George W. Goethals of the Canal Zone and Brig. Gen. Clarence R. Edwards, commanding the gress relative to the Panama Canal will call before the military committees presumably regarding the Panama canal troops in connection with

the general army reorganization nlan A bill has been introduced in the lowing South Carolina postmasters: senate by Senators Banks and Stuck-S. T. King, Georgetown; M. J. ey to abolish the state tax commis-Spears, Lamar; A. C. Ligon at Orange- sion. The bill has been referred to

By the provisions of the agricultural committee bill, which received governor, upon recommendation of under bond of \$300.

No Two Eyes See Alike.

"There is an old saying that 'seeing's believing.' In ordinary matters this may be so," writes Professor John Ait ken in a letter to Nature. "but the belief is not necessarily true and in questions of color is full of pitfalls. No two pairs of eyes see colors alike. This does not refer to color seeing and col or blind eyes only, but there is reason to believe that all eyes differ more or less in their perception of color."

WAREHOUSE LAW

PROGRESSIVE PROGRAM OUTLIN-ED AT FARMERS' UNION CON-

ANTI - BOOZE BILL PASSES ONE KILLED; TWO WOUNDED ORGANIZE AND COOPERATE

Represented at Meetings.-Some Prominent Speakers.

Columbia.-Speakers addressing the was raided early Sunday morning by conference held in Columbia under the Woman suffrage met defeat in the a hostile zeroplane, which dropped auspices of the South Carolina State of organization and co-operation A second attack, this time, by two among the farmers and business men stitutional amendment to be submit hostile seaplanes, was made on the of the state if the agricultural reted to the voters at the next general Kent coast early in the afternoon. No sources are to be developed to the election. This was the first time that casualties have been reported. The highest point. Practically every county in the state was represented at the meetings, which were held in the chapel at the University of South Carolina. H. T. Morrison of Charleston county, president of the union,

> necessity of organization and co-opera- systems are excellent. There are tion among the farmers. He gave some instances of actual co-operation. southern California, he said, has been ties and corrections commission, doing a very large business on a very which body was created by the last small paid up capital. "Carlcads of session of the general assembly. oranges," he said, "are sold while is the intention of this commission to "One man killed; two men, one wo rolling. Fruit is sold through the conduct the jail in accord with modagency for the benefit of all its mem- ern ideals—as a place, primarily, for bers, thereby securing the benefits of correctional detentions, rather than genuine co-operation." An outline of merely as a place for punishment. the work of the Scott County Cotton Growers' association in Arkansas was sketched by the speaker, giving their plan of co-operative selling of cotton and cotton seed and showing advantages of same to the individual members. Instances of the loss to the farmer through lack of information and lack of co-operation were given by

Passage of a series of resolutions intended to aid in the betterment of agricultural conditions in the state market were adopted at the night session of the conference. The session was held immediately following the address at the state house by Clarence

The purpose of the state warehouse system was outlined in an address by John L. McLaurin, commissioner. He explained the system of grading cotton. He said that the warehouse system should be further developed and a selling agency established as a part

The farmers' conference adopted resolutions indorsing: Re-election of John L. McLaurin as warehouse commissioner.

Act for Torrens system of registration of land titles. Continuation of appropriation for cattle tick eradication.

Creation of a system or rural credits. Appropriation to meet the terms

of the Lever bill. ...Some provision for combating the ravages of the coming boll weevil. A bill enlarging the scope of the state :bureau of marketing.

Governor Names Delegates. Columbia -Gov Manning has anpointed the following delegates to the al child labor committee, to be held in Asheville, February 3 to 6: The Rev. Z. T. Cody of Greenville, George B. Cromer of Newberry, John Porter Hollis of Rock Hill, the Rev. A. T. Jamison of Greenwood, Joseph A. McCul-Halifax, N. S .- The British freight of Columbia and W. F. Stackhouse of Marion.

> Coast Artillery Company Ready. Spartanburg. - The Spartanburg Coast Artillery company, fully manned and officered, awaits offical recognition from the office of the adjutant general of South Carolina. The fol-Rogers, secretary and treasurer.

Guard Appeals to Solons. Columbia.-The necessity for an appropriation of \$25,000 to reimburse the federal government for property shortage was stressed at two sessions Panama on Monday for washington. South Carolina. A committee was Governor Goethals will appear before appointed to confer with the ways two years ago. the appropriation committees of con- and means committee. "It will be the appropriations while General Edwards legislature fails to make the appropriation," said one of the members. Thirty officers attended the meeting. Governor Manning and several others addressed the association.

Mr. Harper, author of one of the three compulsory educational laws introduced at the 1915 session, introduced a bill in the house to submit to the qualified electors of the state at the general election in November the question of compulsory school attendance. The voting unit is made the county.

The standardization of all school books used in the public schools is naval militia, recorder. sought in a bill introduced in the house by Mr. H. H. Harris. The measure provides that the books shall be those indorsed by the state board of education.

One Reason.

"Do you know why money is so scarce, brothers?" the soap box orator demanded, and a fair sized section of the backbone of the nation waited in leisurely patience for the answer. A tired looking woman had paused

for a moment on the edge of the crowd. She spoke shortly: "It's because so many of you men spend your time telling each other of books and manuscripts. This was why 'stead of hustling to see that it about the year 330 B. C.

GREENVILLE'S BIG NEW JAIL

Splendid Modern Structure is Completed. - Equipment Second to None, Safe and Sanitary.

county jail is now completed and was

pecupied last week. There is space for 125 prisoners. This jail is just the anthithesis of the old which it replaces, as the new structure is strictly modern. Men who have visited several fine jails state that Greenville county has one which in equipment is second to none. Every attention has been given to sanitation and to safety. The structure is fireproof. Provision is made for the sep-House Rushes Through Liles Bill Pro No Naval or Military Damage Done, Nearly Every County In the State is aration of different classes of prisoners. At the front of the jail proper is a residence section for the jailer. The cells on the first floor will accommodate 40 negro men. The second floor is identical, and will be used for white men. On the third floor are cells for 12 white women and 16 negro women; also a large cell for boys. A hospital ward is al. o praced on this floor. In the basement is a kitchen, laundry, store room, poffer room and se on. A padded cell for violent prisoners is provided, as are two deten-

> This jail costs something more than \$30,000. Its erection was authorized President Morrison made a short by the last session of the general asopening talk emphasizing the great sembly. The heating and ventilation shower baths provided on each floor.

tion rooms and one consultation room.

There are lockers for each cell where

the clothes and other belongings of

The new place of detention will be under the management of the chari-

Sheriffs to Ald Each Other.

Columbia.--Co-operation in the enforcement of all laws was the spirit of the talks delivered at the winter meeting of the South Carolina Sheriffs' association. Two seasons were held, the first in the assembly room of the Chamber of Commerce and the second in the Richland county court house. Nearly a score of sheriffs attended the sessions.

Cannon G. Blease, sheriff of Newberry county, was elected president of the association to succeed J. Elmore Martin, sheriff of Charleston county. T. S. Burch, sheriff of Florence county, was chosen as vice president. Hendrix Rector, sheriff of Greenville county, was unanimously re-elected secretary and treasurer. The by-laws of the association were amended in order that he might serve a second term.

The following sheriffs were present: .. Sheriffs Burts of Abbeville, J. Elmore Martin of Charleston, Sim J. Miller of Lexington, F. F. Hill of Caihoun, J. M. Dozier of Marion, J. H. M. Tshley of Anderson, Cannon B. Blease of Newberry, A. M. Salley of Orangeburg, D. C. Colvin of Chester, J. D. Ackerman of Colleton, John C. McCain of Richland, James Macfie of Fairfield, J. A. Lewis of Horry, J. B. Morris of Barnwell, T. S. Burch of Florence, Hendrix Rector of Greenville, R. J. Polard of Mariboro and E. B. Gambrell of Claren-

Cotton in Florence.

Florence.-The cotton ginned in Florence county for the past season now amounts to 30,017 bales as president is expected to speak brief-12th annual conference of the nation against 45,343 last year prior to Jan- ly at several cities and towns through uary 1. The farmers through the county are going to work bravely and the lands are pretty well broken all through the county, ready for spring planting. The problem of the fertilizers has not been settled yet, but lough of Greenville, J. Whitner Reid the farmer is trusting to providence part of it. There has been a great deal of grain planted and every preparation being made for raising hogs.

Eight Foreign Steamers in Port. Charleston .- There were in the port of Charleston one morning recently eight foreign steamers and four Amerlowing permanent officers have been ican coastwise vessels, making the selected: J. M. Wallace, captain; J. largest number at any one time since Hertz Brown, first lieutenant; J. N., before the war began in July, 1914. Wright, second lieutenant; Allen Six of the vessels are British ships, one Dutch and one German.

SOUTH CAROLINA NEWS ITEMS.

W. F. Stevenson of Cheraw anwith Congressman David E. Finley

When the Oakland public school The Republic Mills of Chester counof \$1,200,000.

The following officers were reelected at the night session: Maj. Patrick J. Drew of Barnwell, president; Maj. R. F. Watson, of Green- Montenegro who said King Nicholas negroes, taken from the Worth county

and Lieut. George W. Beckett.

The Öldest Libraries. The oldest libraries of which we have any certain knowledge are those brought to light by excavations among the ruins of the east. Among these are the Babylonish books inscribed on clay eight times around the world. sublets, supposed to have been prepared for public instruction about 650 B. C. It is said by Aristotle that Strabo was the first known collector

Greenville.-The new Greenville

Manning Cimes.

REBEL LEADERS IN NOVEMBER DECIDED ON MASSACREE.

MEN ACCOUNTABLE

Washington Government Knew of Plans of Rebels But Depended on Carranza For Safety.

Washington.-Death to Americans in Mexico and destruction of their months to five years for the first ofproperty as well as war to a finish fense and one year to five years for the Cedillo brothers and many lesser 30 days. The bill does not apply to chieftians. Meager reports of this gathering offenses committed prior to the en-

came to the state department long actment of the act, should it pass. ago but they were not made public and until this time few people in facto government.

The massacre at Santa Ysabel, attributed to bandits led by Villa ofpetrated in accordance with the rebel been sold. Sales are to be made only convention order. Officials think the at the county seats in the 15 counlong period that passed after the Cor. ties which went dry January 1. It is doba meeting before the murders was because of the time required by the various delegates to make reports to their commanders, and the fact that the news of the convention's decision had to be carried to subordinate military commanders by courier. Cormiles from Santa Ysabel.

Americans from being carried out. \$500 or less than \$100. They are believed to have the situation fairly well in hand now, although the chiefs whose delegates met at retrenchment has been the indorse-Cordoba still are in the field, operat ment by the ways and means com- making of test gauges. Some of the the liquid iron, which dissolves the ing more or less openly.

PRESIDENT'S TRIP APRROVED.

Will Stop at Pittsburg, Cleveland, Milwaukee, Chicago, Detroit, Des

Moines, Topeka, Kansas City. Washington .- Final plans for President Wilson's forthcoming trip through the Middle Western States to speak on national preparedness approved include stops at Pittsburg, Cleveland, Milwaukee, Chicago, Des Moines, Topeka and Kansas City. A tentative itinerary drawn up included St. Louis, St. Joseph and Davenport, but these cities have been eliminated and Milwaukee and Topeka substituted.

On the Middle Western trip the president will leave Washington January 28, and will return February 4. In addition to formal addresses the which he will pass.

German Campaign In Egypt. Egypt is meeting with obstacles, it is introduced and it is probable that the announced here, due to the lack of matter will be disposed of during the to provide and he is ready for his coal to operate the railroad which the coming week. Germans have constructed southward through Syria to the edge of the desert proval of the Wightman bill has gone approaching the Suez Canal. The ab- on record as favoring an open pasture

> Persia Not Victim of Austrians. Vienna, via London.-The govern- one is eligible for the state bar examment has informed Frederic Penfield, innation. The bill will be sent to the the United States ambassador, that house this week. no Austro-Hungarian submarine was The house committee on railroads concerned in the sinking of the Pen- returned an unfavorable report on Mr. insular & Oriental Line steamer McMahan's bill providing that street break into a shower of some 1,200 None of them is large enough to be of

Insurance Companies Make Claims. nounced his candidacy for the nation- life insurance companies will claim a house of the general assembly, Claral house of representatives from the part of any indemnity Germany may Farmer, made a forceful speech in United States troops in the zone, left of the National Guard Association of Fifth district. He was in the race pay on account of the loss of life on the hall of the house on "Legislation the Lusitania has raised a question | Needed by Our Rural Interests". for which State Department officials say there is no precedent. Heirs of DuRant of Clarendon, Senator Sinkler last call for the National Guard is the at Greenville caught fire a few morn- many of the Lusitania victims already ings ago 600 pupils marched out of have presented claims. Final decision Calhoun, was appointed to prepare a the building in less than one minute. as to whether insurance company suitable memorial on the death of claims on account of policies paid out | Louis Appelt, former senator from ty have been chartered with a capital shall take precedence will rest with | Clarendon county. Secretary Lansing.

> Truce a Ruse to Get Time. Rome.-Premier Miouchkocitch of

ville, first vice president; Maj. A. H. had prepared documents justifying jail here and rushed in automobiles to Silcox of Charleston, second vice the conduct of himself and his min- the adjoining county of Lee, where president; Maj. J. Shapter Caldwell isters in regard to the peace negotia. they were hanged and shot were cut of Columbia, secretary; Capt. A. C. tions with Austria, is quoted in a dis-Doyle of Columbia, treasurer, and patch from Brindisi to the Steini them. Coroner's inquest returned a in your clothing.—St. Louis Post Dis-Lieut Bartley Bull, South Carolina News Agency as saying that Montenegro arranged a truce with Austria "death by strangulation and gunshot The members of the legislative as a ruse to enable her to gain time. committee are: Maj. R. F. Watson, After the capture of Mount Lovcen Maj. JJ. S. Caldwell, Capt. J. Frost by the Austrians, the Premier is re-Maj. J. S. Caldwell, Capt. J. Frost ported to have said, this gave the steps authorities may be taking are Montenegrins a week's time.

A Long Sidewalk.

Good Reason. "Why live in the past? Why not forget it?" "The bill collectors won't let me."-

Louisville Courier-Journal.

Stripes for Violators. The general assembly of South Carolina, the lower house especially, seems determined to put stripes on the person violating any law of the state relating to the sale, shipment or storage of intoxicants. By a large majority, 71 to 18, the lower branch refused to kill Mr. Liles' bill providing for a chaingang sentence without the alternative of a fine. Debate on the measure began early in the afternoon and was resumed at night. Indications point to the final enactment of the bill, as it is said that there is little objection to "making prohibition prohibit" to be found among the members of the senate. A number of amendments to the Liles bill were proposed, but only those introduced

by the author himself were passed, each of the others meeting instant death at the hands of a determined body of legislators. The bill provides for a chaingang sentence of three Carranza, was determined each subsequent offense. No option upon, it has just became known, at a of a fine is given a presiding judge. formal convention of the Mexican rev. The bill also carries a provision that rejected. The apparent absurdity-it olutionary leaders held in November a circuit judge may suspend all of at a ranch near Cordoba. Present and the imprisonment except 30 days for an engineering point of view-is dejoining in the agreement are said to the first offense and 60 days for the haveb eenr epresentatives o f Villa, second offense; in any instance the Zapata, A rgumedo, Higinio Aguallar, person convicted must serve at least cases now pending in courts or to

Dispensary Stock A bill which provides a plan for Washington knew that there was a the disposal of stocks in the recently general conspiracy against Americans, closed dispensaries was introduced in or even that the various rebel fac- the senate by Senators Banks, Lide, tions in the field in Mexico had Sinkler and Spigner. The general effected any kind of an agreement for plan is to open the dispensaries so concerted activities against the de that the surplus stock may be retailed under the provisions of the gallon-a-month law, which becomes effective the first of the year, and to keep them open until all liquors have estimated that approximately \$100,-000 worth of whiskey was brought

No Whiskey "Ads"

The temper of the upper house toward positive anti-liquor legislation was indicated when the Carlisle bill, doba is on the railroad between Vera making the advertisement of liquors Cruz and Mexico City and some 1,000 in newspapers or on bill-boards a misdemeanor, passed third reading The Carranza authorities have been and was sent to the house without a fully advised concerning the move dissenting voice. During the rapid ments of the rebels and have been transit of the bill through the sendepended upon by the Washington ate no opposition whatever was degovernment to take every possible pre- veloped . Violation of the measure is and you can get a satisfactory shave. caution to prevent the threats against punishable by a fine of not more than Enforcement Fund.

> The big exception to the policy of prohibition and gallon-a-month laws. levy will be kept down to six mills. A number of bills on taxation presage the fight that has been freely predicted. The latest rumor, however, is that opposition to the South Carolina tax commission will not come to a head, the fight being confined to the methods to be pursued in the assessment and equalization of property. Various measures and joint resolutions proposing constitutional amendments have been introduced. debate on which will hardly material-

have been disposed or. Discuss Warehousing. The South Carolina cotton ware- resembles watchmaking. housing system will also come in for discussion as it is understood that a about forty inspections and may be rebill will be introduced along the lines | jected at any stage. suggested in Gov. Manning's annual message, providing for a board of it ought to be, one would think, perthree commissioners. A bill, making fect, but a test shell is taken from the state's warehouse receipt a safe London.—Germany's campaign in collateral for loans, has already been

The upper branch through their apsence of coal prevents the actual for lawyers. The Saluda senator by opening of the road to transportation. a small majority carried his point abolishing the present requirement of two years of specified study before

ing on or discharging passengers. Washington.-Notice that several Invited by resolution of the lower

A committee, consisting of Senator of Charleston and Senator Banks of

Five Negroes Lynched. Sylvester, Ga .- The bodies of five verdict that the negroes came to their wounds at the hands of unknown parties." There had been no arrests in connection with the lynching and what not known here.

Saving the Innocent Ones. Governor Stewart of Missouri once The annual product of bricks in the found eight convicts mowing the United States is 25,000,000,000. This grass of the statehouse lawn. is enough to lay a five foot sidewalk questioned them. Seven of them said they were innocent men. The eighth said, "I stole er hawg, sub, an' it was a mos' 'stonishing good hawg!"

"You're pardoned!" Stewart thundered. "Leave the prison at once, We must preserve our innocent convicts from contamination."

Ordeals Through Which a Big Gun Missile Must Pass.

THE SOFT NOSE PROJECTILE.

Its Ability to Bore Its Way Through Heavy Armor Plate Without Exploding Until After Its Impact Was Discovered by Accident.

Everybody knows that the modern shell is one of the most diabolical of man's inventions, but how many of us delicate and complicated? Recently some firms holding con-

detail in the specification, and, as a re-They will never do anything of the signed of set purpose. There is a somewhat similar anom-

aly in the big shell for penetrating armor plating, which was introduced in consequence of an accident. One day a test shell was fired at a piece of armor plating from the soft side, and the projectile went clean through it and exploded after impact, whereas a similar shell fired against the frontthe hardened and tempered side-shattered and left an indentation of only a few inches.

This singular incident set somebody thinking, and in consequence the high explosive armor piercing shell is now given a soft nose. To the hard point is attached a cap of soft metal, with which addition it will go through the toughest piece of armor plate. What happens on impact seems to be this: The cap spreads, holding the point and so enabling it-remember that the shell is revolving rapidly-to force its way unbroken through the bard face of the plate by a sort of boring action.

No less curious is another fact concerning the points of such projectiles. After the heads have been worked the shells are left for weeks before they undergo the next stage, because, strong as they look, they are liable to snap.

Why? Think of the razor. Constant stropping twists the grain, with the result that the steel gets "tired" and will not yield a keen edge. But if you put the thing away for a few weeks the grain will return to its normal state, In a similar way the grain of the steel is affected by working, though of course to a much greater extent, and until it is "set" the makers must go cautiously.

Steel shows a like eccentricity in the of \$50,000 for the enforcement of the and the instruments employed are so delicate that they have to be Withal it is expected that the state quickly lest the heat of the hand causes the metal to expand.

Now, when a groove is cut in a piece of steel which is to be used as a test gauge the work is laid aside for weeks, perhaps months. Why not finish it at the surface of the iron which poweronce? Because the groove, though dead fully compresses the interior part. true when cut out, may be otherwise in | when it in turn cools and tries to exa short time, even though it has been absolutely untouched.

portion undergoes about a score of operations, and the brass cartridge case ize until after many of the contented attached to the base requires about sixmatters left from the 1915 session teen, counting from the disk of sheet there is the fuse, the delicacy of which

Altogether the shell is subjected to

After a shell has survived this ordeal every 120 and actually fired from a gun into a bank of sand. It is then again examined, and if the contour about the powder pocket is expanded away goes the whole batch, because if they were fired the grooving might be torn out of

Perhaps the most striking illustration of the minute care exercised in projectile making is that every shell is weighed over and over again. If you produce an eighteen pounder high explosive shell it must be only a few drams over to start with, who can say what may or under its normal weight; otherwise be done some day? it is rejected.

In this connection it may be of inter- have fallen upon the earth from outer est to note that an explosive shell that space that contain microscopic diaweighs only about seventy pounds will monds resembling the artificial ones. cars shall stop on the near side of a pieces. A single one of the monster any importance except as scientific street corner for the purpose of tak- projectiles fired from a fifteen inch na- curiosities, but as such they fill the val gun will weigh 1,950 pounds. It mind with wonder. Where and how takes twelve seconds for the projectile of a twelve inch naval gun to reach its what star? ence Poe, editor of The Progressive point of impact when firing at a range of five miles. To fire a battleship broadside costs about \$20,000. - Exchange.

> Literal. "Pop, tell me some conundrums."

"Conundrums? Why, I don't know any conundrums, my son." "Oh, yes, you do! I heard mother tell Aunt Mary the other day that you keep her guessing most of the time."-Boston Journal.

Been Through Them. Mr. Bacon-Do you know, dear, I have only two suits of clothes to my

name? Mrs. Bacon-Yes, John; I have noticed that you have very little change

Fretful thought has more to do with discontent than all the troubles that

Bridal Customs In Spain. ceremony. The wedding pair depart -onseisnquo pies eq ... woun no cod., quietly to their new home, where they

their respective relatives.

TESTING A SHELL. CARBON A PUZZLE

The Mystery That Links a Diamond to a Lump of Graphite.

A SECRET OF THE MOLECULES.

Why Exactly the Same Elements Form Such Different Substances Is the Riddle-Changing a Mass of Charcoal Into a Minute but Pure Gem.

Carbon, one of the seventy or eighty primary elements out of which all matter is formed, occurs, pure, in two entirely different and contrasted forms. These are, first, Carrent and, second, tracts for making high explosive shells graphite or plumbago central lead). If took upon themselves to "correct" a each of these substan es was a compound or mixture of chierent elements. comprising in both cases carbon as the principal constituent there would be no cause for mystification. But they are absolutely the same unmixed thing, alis, in fact, an absolute absurdity, from though in appearance and in properties

they are totally unlike! The molecules of each are the samethey are molecules of carbon, and nothing else-but in one the molecules are so arranged that they form a transparent, excessively hard, solid crystal, endowed with marvelous powers of refracting light which make it the most dazzling of all gems, and, in the other, the same molecules are so arranged that they form a dull, soft, black or gray substance that leaves a dirty streak when rubbed upon paper.

The secret lies within them It is in the internal play of the nolecular forces, but what makes those forces act so differently when they have precisely the same material to work upon? Burn a diamond and it turns to graph-

Charcoal is a third form of carbon. ordinarily produced by the charring of wood, whereby all the other elements contained in the wood are removed, leaving the carbon in the form of a soft, black substance which, in some ways, resembles graphite.

Charcoal and a few similar substances are called amorphous, or "shapeless" carbon, because they are never crystallized, as diamond always, and graphite sometimes, is. Yet charcoal, too, has the royal diamond blood. That blood sometimes sits on the throne and sometimes slaves in the mine: but, despite the turn of chance below it is always itself.

Charcoal can turn to diamond, and the things that make it turn are great heat combined with great pressure. Here in outline, is the process, as it has been performed in laboratories. especially by the French chemist, Moissan: Into a mass of molten fron a quantity of pure charcoal is put. Then mittee of the bill providing for a fund measurements of shells are very fine, charcoal very much as water dissolves sugar, is placed in an electric furnace 5,000 degrees F. Immediately it is plunged into cold water, in order to

cause a quick cooling The result of the sudden cooling is the formation of a solidified shell on pand. The result of this compression is to force the imprisoned carbon (char-As a concrete proof of the elaborate | coal) to crystallize into diamond. If nature of projectile making take the the molten iron is allowed to cool at case of the shrapnel shell. The steel ordinary pressure the charcoal only turns to graphite. So we see that the magic wand whose touch makes diamord of what would otherwise be

mere dull pencil lead is the wand of It is believed that this is substantially the way in which nature herself makes diamonds. In the great diamond mines of South Africa there is evidence that the gems were formed in the bowels of ancient and long since extinct volcanoes, where, of course, both intense heat and enormous pressure were available in unlimited quantities. But nature in her huge volcanic laboratories works on a scale which we cannot imitate, so that there is no cause for surprise in the fact that, while she can make diamonds as big as walnuts when she chooses, we can make none even as big as a pin's head. The largest artificial diamond is less than a millimeter in diameter. But it is genuine diamond, and with that fact

There are a number of meteors which were they created-in what world or

teors are iron and nickel, with occasional traces of cobalt, copper, aluminum, tin and magnesium.-Garrett P. Serviss in New York Journal.

The principal metals found in me-

"Gadspur is a man who prides himself on doing things." "True. But I had to disappoint him the other day. "How so?"

"He wanted to do me."-Birmingham Age-Herald. Cruel Comment. Manager-I say, Hamfat, old man, why don't you join a moving picture company? Crushed Tragedian-Why

should I so degrade my art, sir? Man-

ager-Because then, you see, you can become a reel actor.-Baltimore Amer-Our life-a little gleam of time be-

tween two eternities.-Carlyle.

Times. In Spain a bride has no girl attend- Nox won-"isotroft out ut potuitet ants to stand at the altar with her. but Altendor 000'01\$ 201 Coffod & 194 Het instead a "madrina." or godmother. -111 peq oun usu sourming us 1308 Neither does she have a wedding cake isul and ni lantom Suidp and se paread

ful powers of the leading woman. remain until the following day, when -napuon aqu on acuanajan quin usu nad they start on their honeymoon. Before -udsmou r of Suigrods sum uomonpoid departing they pay a formal visit to resulting a 101 fuels sounder uy

Stark Realism.