HOW BLOCK SIGNALS WORK

Operation of Ingenious System That Insures the Safety of Railroad Passengers.

Comparatively few people know just what is meant by block signals when they read that a railroad has established the system on its lines. The block is a length of track which, on double track roads, has at its en-trance a post and movable arm, and on single track lines one at each end. To say that a line has every inch protected by this system means that the entire line is divided into consecutive blocks. Only one line from Chicago to New York is thus protected, and of the total in the United States, one-third is on the Union and Southern Pacific

The operation of the block system is simple but absolute. In a few words, it means that a train cannot move from one block into the next until the latter block is empty. As a train moves forward, the signal arm is set to show that the block just left be entered by the next train following.



zontal until the block is vacated, when the arm automatically drops and points diagonally toward the ground. Therefore, as long as the engineer sees only drooping signals he can keep on going, but the instant he finds the arm stretching out over the track, he must come to a stop, knowing that that block is occupied

The energy mentioned above is electricity; the current being obtained from a battery near each post. The rails of each block are made as if all of one piece by connecting the joints with wire. The extreme ends are then connected and thus a circuis formed in which the current flows. When no train is in the block, the mechanism operated by the current pulls the arm down and holds it there. When a train enters the block the wheels and axles, combined with the rails, form a shorter circuit, the energy that held the arm down is withdrawn and up it swings to a horizontal position.

by another train.

Each block is independent of all other blocks. When the last wheels of a train leave it, the current resumes its flow and the signal arm at the entrance is pulled down to the "proceed" position. But before the hind wheels have finished doing this, the front wheels of the locomotive have entered the next block and caused the arm there to rise to the

For a single track line the autoarrangement is the same, but there is a signal at each end of the To prevent two trains on a single track line entering a block at same time from opposite ends, before the entrance to a single track block is reached the train sets a stop signal at the far end of that block, and as it enters it sets the entrance signal to stop just as is done on double track. Half a mile or more before reaching the entrance signal of each block the engineer comes what is called the "distant," which tells him how the other or "home" signal is set.

As the automatic signal is constructed, it cannot show "go ahead" unless the entire combination of rails, wire, current, magnet, etc., is working perfectly. If a wire parts, a rail breaks, a battery fails, a switch point

opens the slightest, fails and the re-leased arm re-sumes the horizontal position. So. when the engineer sees the stop sig-nal, he knows that train on the block, a broken rail or signaling appa ratus.



At night colored lights are display on the same posts. will burn eight days without replenishing, but are refilled every four or five days. When the home signal is stop, the engineer sees the flame through a red glass. The caution light on the distant is yellow. lights means go ahead and is used

on both the home and distant signals. Where two or more lines cross at grade the general plan of semaphore arms for day and colored light for night is the same, but owing to the complications all signals are con-trolled by levers operated by men from a central station. The crossing and contiguous tracks are governed by the interlocking system. When this is in perfect order and the crossing unoccupied, it displays "stop" to track approaching the crossing. Any change must be made by the signalman, and to display "proceed" he must first lock all other approaches with the stop signal.

There are now about 11,000 miles of railway equipped with the block system. The only line thus protected every inch from Chicago to California is via the Northwestern. Union and Southern Pacific. One-third of the 11,000 miles of automatic signaling is on the Harriman lines-and the Northwestern has more miles of double track automatic than any other railway.

For the Hostess

Chat on Interesting Topics of Many Kinds, by a Recognized Authority

A Novel Shower. A dozen girls who lived for years as neighborhood friends showered one of their number, who is to be a December bride, in this unusual manner: The hostess asked them all to meet at her house informally at two o'clock, the bride-elect was asked to come at three. In this way the host-ess explained her scheme, which was as follows. She had material for each one to make the following articles: A dusting cap, three dusters, a broom bag, ironing holder, laundry bag, kitchen apron, clothespin bag, roller towel and a case to wind linen doilies on The entire cost was added and divided equally and then each article was wrapped in tissue paper, tied with ribbon and hidden throughout the rooms. When the honored guest arrived, they chatted awhile, then the hostess announced that a fairy godmother had confided to her that there were packages of value concealed within the portals of the room, to be discovered only by a bride-elect and to the tune of bridal music. Whereupon the hostess sat down to the piano and played wedding marches while the merry lit-tle bride hunted the hidden treasures. guided by the loud or soft tones on the piano. All the packages being discovered, they were opened and the girls all set to work on which ever piece they chose. They pronounced this a utility "shower," and it certainly was practical, for the guest of honor said her mind was so in the clouds that she had never even dreamed of the articles presented. Besides it was a jolly afternoon. Refreshments were English toasted muffins, orange mar

malade, preserved ginger and delicious tea, brewed by the hostess. The Golden Wedding.

A fiftieth anniversary to be celebrated this month is going to be a most beautiful affair. The invitations are lettered in gold engraving and ask you to arrive between the hours of eight and ten. The decorations throughout the rooms are to be in yellow, consisting of showers of gilt wedding bells, which are to swing from every chandelier and be sus-pended by yellow tulle and yellow satin ribbon over the heads of the couple where they will stand to receive congratulations. This corner is to be made a perfect bower of greens studded with yellow chysanthemums Brass candlesticks holding yellow can dles are to stand on piano, mantel, bookcases, etc. The honored bride will carry a bouquet composed of 50 yel-low roses, and the refreshments are to be orange ice, New York ice cream sunshine cake iced with yellow, and the bonbons are to be wrapped in S., paper. Gilt bell-shaped boxes are to be given as souvenirs, bearing the paper of the happy pair. The monogram of the happy pair. The November stone is the topaz, and it works up beautifully into seals, with handle of gold, into watch fobs and pins. I have seen all these articles and they will go as gifts to this wedding. As every one likes to give a toast and often people are not preding. pared, there are to be perfectly exquisite cards passed to each one to be read aloud after refreshments. These cards are done in gold lettering, with a mother of pearl motif worked out beautifully. The choicest gems of our best writers are found on these latest creations. I must admit they are only postcards, as the reverse side shows. done For want of a better name I call them fects.

"Sentiment" cards. After the guests have paid this pretty tribute the cards are to be collected and put in a box covered with cloth of gold and presented to the aged couple.

A Guessing Contest.
This clever little stunt was the finale at a shower given for a November bride. A table was brought into the room having on it a lot of things, each one representing a cake; cards were passed bearing the duplicate numbers of those on the articles. Great fun was had in the guessing. Here are some of the objects, and a hostess may enlarge the list as she desires: A sponge (sponge cake), a little toy hen for "layer cake," a chocolate lozenge (chocolate cake), two little Cupids (angel food), a picture of a bride in full wedding costume (wedding cake), a bit of gold and silver gauze or rib, bon (gold and silver cake), etc. For prizes there were recipe books and several beautifully decorated cakes.

MADAME MERRI

CARE OF THE TABLE LINEN

Best Quality Will Quickly Spoil If Not Handled in the Proper. Manner.

The careful keeping of table linen will mean more toward a perfect tathan perhaps the quality of linen itself. The most exquisite table linen will look no better than the poorest quality if it be thrown into a too small drawer

Just a pair of tablecloths will go further if they are kept well flattened or, better still, rolled on a pasteboard r wooden roller than a dozen ill-kept

centerpieces, if not rolled, should be spread flat, in a full-sized box or a linen-covered portfolio. The portfolio is a reliable addition to the dining room or pantry, and it may be made at home by covering two pieces of pasteboard with tan-colored linen or crash, hinging them together with coarse linen thread or with narrow ribbon strips an inch in length, so that the portfolio will hold more flat linen pieces." This, when filled, is tied together with ribbons and kept in a napkin drawer, where even the sud-den rush for napkins can no longer wrinkle the embroidered linens



Skeleton bodies are popular. There is quite a fad for onal matrix. The Japanese wash silks are loveier than ever.

Foliage colorings abound. Enormous black cherries are used on some of the hats.

Coats for girls' suits are plain and almost straight. The latest Parisian novelty is the

hand-tucked waist.

Some of the standing collars are hemstitched around the top.

Belts will match the skirts instead

of the waists this season.

Most of the new crepe blouses are inset with Irish crochet lace.

Pretty little neck bows are made of

colored open-work embroidery.
Swiss embroidery, whether hand done or machine, gives excellent ef-

NEW STRENGTH FOR WOMEN'S

How to Make a Bad Back Better.

Women who suffer with backache, bearing down pains, dizzy spells and that constant feeling

of dullness and tiredness, will find hope in the advice of Mrs. Mary Hinson Strother St., Mt. Mary Hinson of 21 Sterling, Ky. "Had I not used Doan's Kidney Pills, I be-

lieve I would not be living today," says Mrs. Hinson. "My eyesight was poor, I suffered with nervous, splitting headaches, spots would dance before my eyes and at times I would be so dizzy I would have to grasp something for support. My back was so weak and painful I could hardly bend over to but-ton my shoes and could not get around without suffering severely. Doan's Kidney Pills helped me from the first, and I continued until practically

Remember the name—Doan's. Sold by all dealers. 50 cents a box. Foster Milburn Co., Buffalo, N. Y.

THE REASON.



Weary-Gee! I wonder wot dat dorg bit me on the foot for?
His Friend—I suppose it's cause he couldn't reach no higher.

Mistake Somewhere.

A story comes from a Kentucky town that is worth repeating. There lives there a woman who says that she has immediate communion with the Almighty, and now and then delivers to those of common clay a message that she has received from on The fact that these messages high. sometimes take on a very materialis-tic hue does not alter their effective-

ness, in her opinion.
One day she went into the office of a well known attorney and approached him solemnly as one about to reveal an awe-inspiring secret.

"The Lord sent me to you for \$25," she announced.

The attorney looked up and smiled.
"That must be a mistake," he replied, blandly, "because the Lord knows I have not got it." Celestial communication was there

upon broken off.

As to the Hessian Fly. The Hessian fly is a German product which was conceived in iniquity and born in sauerkraut. It is a long, rangy fly with a bite like a steel trap, and it lays a pale blue, oblong egg at the rate of 30,000 an hour. The Hessian fly will eat anything from decayed custard pie to a glass inkwell, but its favorite dish is the double neck of a fat gent. This bird can perform a two-step on sticky fly-paper crooking its toes, and is proof against rough on rats, the daisy fly killer, and a strychnine hypodermic. No Hessian a strychnine hypodermic. No Hessian fly was ever known to die of anything but old age, which accounts for the color of its whiskers. If it ever fastens upon your jowl, it will stay until removed by the undertaker.—Manchester (Ia.) Press.

Looking Brighter. "Things are looking brighter now," says a Billville citizen. "The sheriff is now my brother-in-law, and he won't levy on my crop; the town doctor boards with me, and doesn't charge a cent for tellin' me that if I don't quit eatin' six meals a day I'll not live to be a hundred, and last of all, the head undertaker is my best friend, and has

promised to fix me finally.
"I feel that I don't half deserve so many blessings, but I've got 'em and I'm going to hold on to them."—

do its work properly. My husband would sometimes have to carry me from the table, and it would seem that would never breathe again.
"The doctor told me that coffee was

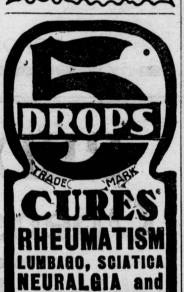
causing the weakness of my heart. He said I must stop it, but it seemed I could not give it up until I was down in bed with nervous prostration.

"For eleven weeks I lay there and

suffered. Finally Husband brought home some Postum and I quit coffee and started new and right. Slowly I got well. Now I do not have any headaches, nor those spells with weak heart. We know it is Postum that helped me. The Dr. said the other day. 'I never thought you would be what you are.' I used to weigh 92 pounds

and now I weigh 158.
"Postum has done much for me and I would not go back to coffee again for any money, for I believe it would kill me if I kept at it. Postum must be well boiled according to directions on pkg., then it has a rich flavour and with cream is fine.'

Read "The Road to Wellville," found in pkgs. "There's a Reason." Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest. The Place to Buy Cheap J. F. PARSONS'



e poisonous matter and acts which he direct causes of these diseases. led externally it affords almost in-relief from pain, while a permanent is being effected by purifying the di, dissolving the poisonous subbee and removing it from the system.

DR. S. D. BLAND

rge Size Bettle, "5-DROPS" (800 Desc \$1.00. For Sale by Druggists. SWARSON RHEUMATIC CURE COMPANY,



If you are a business man, did you ever think of the field of opportunity that advertisirg opens to you? There is almost no limit to the possibilities of your business if you study how to turn trade into your store. If you are not getting your share of the business of your community there's a reason. People go where they are attracted - where they know what they can get and how much it is sold for. If you make direct statements in your advertising see to it that you are able to fulfill every promise you make. You will add to your business reputation and hold your customers. It will not cost as much to run your ad in this paper as you think. It is the persistent advertiser who gets there. Have something in the paper every issue, no matter how small. We will be pleased to quote you our advertising rates, particularly on the year's busi-

MAKE YOUR APPEAL

to the public through the columns of this paper. With every issue it carries its message into the homes and lives of the people. Your competitor has his store news in this issue. Why don't you have yours? Don't blame the people for flocking to his store. They know what he has.

The Home Paper

Gives you the reading matter in which you have the greatest interest—the home news. Its every issue will prove a welcome visitor to every member of the family. It should head your list of newspaper and periodical subscriptions.

C. G.SCHMIDT'S.

MEADQUARTERS FOR Popular Bakery,

FRESH BREAD, PIES.

FANCY CAKES. ICE CREAM.

CONFECTIONERY

Dally Delivery.

Allorders given prompt and skillful attention.

Enlarging Your Business



want to make more money you will read every word we have to say. Are you spending your money for advertising in haphazard fashion as if intended for charity, or do you advertise for direct results?

Did you ever stop to think how your advertising can be made a source of profit to you, and how its value can be measured in dollars and cents. If you have not, you

are throwing money away. Advertising is a modern business necessity, but must be conducted on business principles. If you are not satisfied with your advertising you should set aside a certain amount of money to be spent

If you are in annually, and then carefully business and you note the effect it has in inness; whether a 10, 20 or 30 per cent increase. If you watch this gain from year to you will become intensely interested in your advertising, and how you can make it enlarge your business.

If you try this method we believe you will not want to let a single issue of this paper go to press without something from your store.

We will be pleased to have you call on us, and we will take pleasure in explaining our annual contract for so many inches, and how it can be used in whatever amount that seems necessary to you.

If you can sell goods over the counter we can also show you why this paper will best serve your interests when you want to reach the people of this community.

JOB PRINTING We can do the finest class of printing, and we can do that class just a little cheaper than the other fellow. Wedding invitations, letter heads, bill heads, sale bills, statements, dodgers, cards, etc., all receive the same careful treatment

-just a little better than seems necessary. Prompt delivery always

Atlanta Constitution. Woman Gets Rid of "Coffee Heart." The injurious action of Coffee on the heart of many persons is well known by physicians to be caused by feine. This is the drug found by chemists in coffee and tea. A woman suffered a long time with severe heart trouble and finally her doctor told her she must give up coffee, as that was the principal cause of the trouble. She writes: "My heart was so weak it could not



Fashion's Latest

On the left is a house gown of Linden green satin with trimming of old gold velvet and gold buttons

the right is a reception gown of king's blue panne velvet, with trimming of Venetian point.