

interruptions which Mr. Pflöging attributed to instructions similar to the classes being held, better supervision, increased efficiency and greater loyalty.

J. W. Kincaid, general chairman of the Union Pacific for the Brotherhood of Railway Signalmen of America, followed by Mr. Pflöging, giving a talk on general conditions of the Union Pacific signalmen, stressing the friendly relations existing between the management and men.

D. C. Bettison, relay shop foreman, gave a detailed explanation of the various types of relays and meters and instruction on the calibrations of volt ammeters.

The afternoon sessions were started by F. F. Seeburger, of the Ohio Brass Company, giving a history of O-B Company's part in the manufacture and improvement of signal bonds, using a number of slides to illustrate the internal structure of signal bond welds.

J. F. Baker, of the Oxnard Railway Service Company, followed with a demonstration of bond application, going into details relative to the proper and improper type of flame to produce best results.

Mr. Bettison, of the U. P., and W. D. Baker, of the Union Switch & Signal Company, then gave an explanation of signal mechanisms, switch boxes, etc., showing the proper methods of preventing trouble which might develop into a signal interruption.

W. J. Pierson, of the Adams & Westlake Company, demonstrated proper focusing and adjustment of the Adlake electric semaphore lamp equipped with Leiby lens and reflector. A. S. Knox then gave a detailed explanation of the manufacture and use of the Edison storage battery. A. H. McKeen, on the days he was present, gave a talk similar to that of Mr. Pflöging's covering the entire Union Pacific System signal performance record.

Classes were attended by 211 signalmen, maintainers, and foremen, 5 signal supervisors, 14 assistant signal supervisors, and 9 maintenance of way welders. Visitors included H. S. Osborne, chief engineer of maintenance of way, division engineers, superintendents and roadmasters; also T. S. Stevens, signal engineer, and his assistant, G. K. Thomas of A. T. & S. F.; J. A. Reynolds of the C. B. & Q., and J. S. Orr signal, engineer of the O. S. L.

## The Color-Position-Light Signal

By G. H. Dryden

First Assistant Signal Engineer, Baltimore & Ohio,  
Baltimore, Md.

**W**HEN speaking of a signal  
Numbered thirteen sixty-two,  
Methinks 'twill be a vacation  
To spend a night with you  
And study your conversation  
'Neath the starry skies of blue.

We met as the day was receding  
And near the approach of night.  
"My friend," said I to the signal,  
"It surely affords me delight  
To meet one of your reputation—  
The popular C.-P.-Light.

"Folks tell me you watch by the roadside  
Without ever thinking of sleep;  
Inviting, cautioning, warning  
O'er mountains and through valleys deep.  
You never grow tired or get tipsy,  
But always vigilance keep.

"They tell me you speak in a language  
That even a fool can't mistake.  
Pray show me, kind friend, I entreat you,  
The bold hieroglyphics you make.  
Explain each and tell me their meaning,  
I beg for humanity's sake."

The reply was from eyes that were glorious,  
They seemed at once to dilate,  
"I represent the last word, sir—  
The others are not up to date.  
Many have tried hard to find me,  
But I was invented by 'Pate.'

"I speak a language that's double  
For each simple story I tell.  
One language I speak by position,  
The other by color as well;  
Combined they convey but one aspect  
Which no other can thus parallel.

"My marker lights show the alignment  
As over the track you go.  
If above, it leads to the normal route—  
To the medium route 'tis below,  
And when no marker I display  
Be careful to run very slow.

"For blocking, I'll show you four colors—  
Red, lunar white, yellow and green.  
Each pair takes a different position  
And color as well 'twill be seen.  
These, when combined with my markers,  
Will indicate just what I mean.

"Lunar white, lower right means 'permissive,'  
You may pass but the block is not clear.  
For 'stop' I show red—horizontal,  
So be sure to stop well in the rear.  
If vertical green I'm displaying,  
Go onward there's nothing to fear.

"Yellow light, upper right means 'approach,'  
A reduction in speed should be made;  
To stop at the next be prepared,  
Regardless of distance or grade.  
This warning of danger ahead  
Should be strictly and swiftly obeyed."

"Is it true that in all kinds of weather  
Through lightning and tempest and hail,  
When the sun at high noon is brightest  
Or when winds are blowing a gale,  
You signal the trains that approach you  
And tell what's ahead on the rail?"

"Far more," quoth the signal in answer,  
"I tell when to exercise care;  
I tell to which route they are leading,  
At what speed they should run and to where.  
I tell them when switches are open;  
I tell if the rail is not there."

"Just one other question I'll ask you  
And then to my home I'll return;  
I am wondering just what will happen  
Should a marker light fail to burn.  
Will this produce a condition  
Misleading to me I would learn?"

"Any light failure creates a restriction.  
You should study my aspects through,  
And that you may best understand me,  
This—I would have you do:  
Stop by and see 'Pate' it isn't too late,  
He will hand you a one ninety Q."