

**GENERAL RULES**

GOVERNING

**Operation of Electric Train Staff System**

ON THE

**LEAVENWORTH TERMINAL RY.**

BETWEEN

**LEAVENWORTH AND STILLINGS JUNCTION**

AND ON

**The Chicago, Rock Island & Pacific Ry.**

BETWEEN

**STILLINGS JUNCTION AND BEVERLY**

---

STROMBERG, ALLEN & CO., CHICAGO.

**GENERAL RULES**

GOVERNING

**OPERATION OF ELECTRIC TRAIN**

**STAFF SYSTEM**

ON THE

**LEAVENWORTH TERMINAL RY.**

BETWEEN

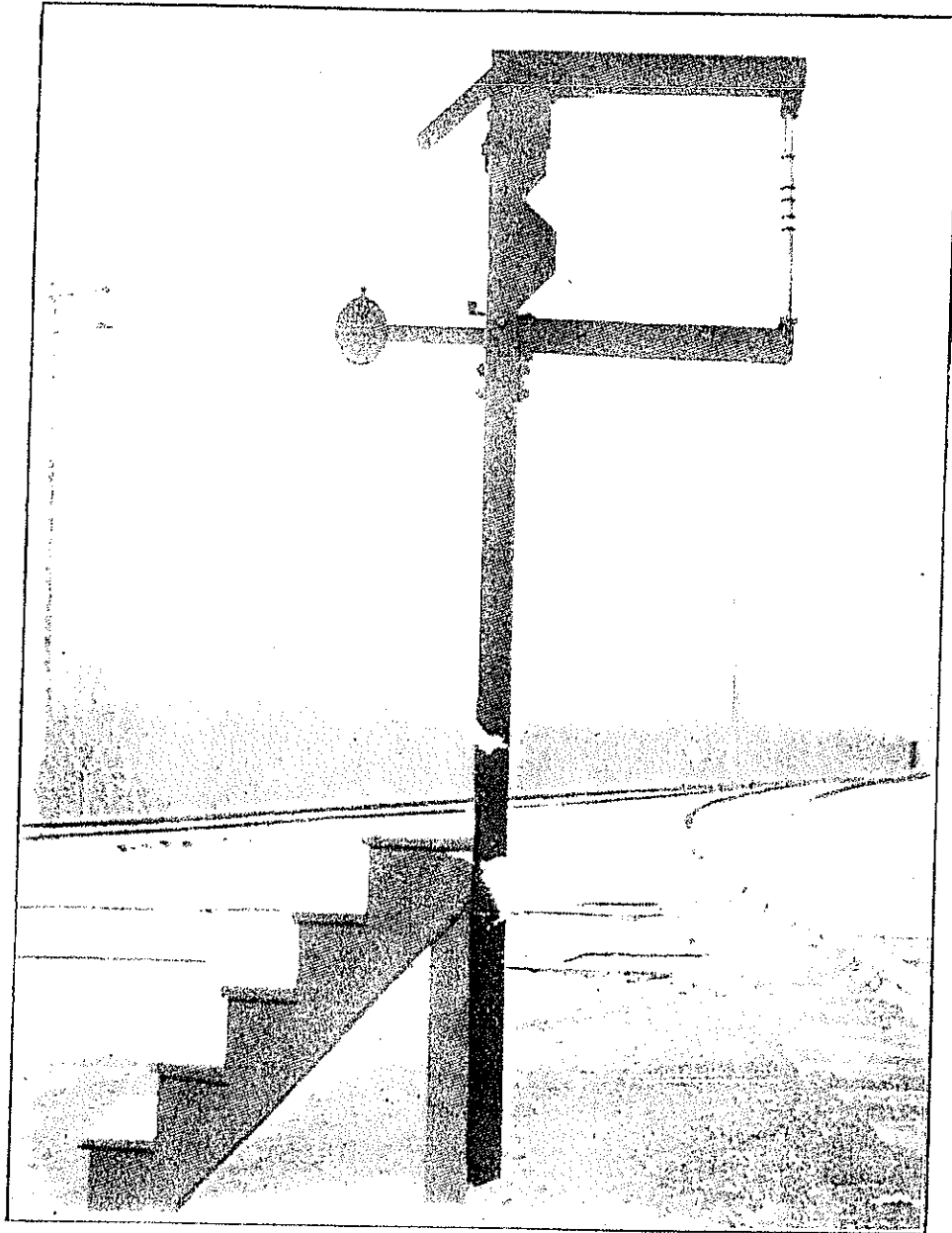
**LEAVENWORTH and STILLINGS JUNCTION**

AND ON

**The Chicago, Rock Island & Pacific Ry.**

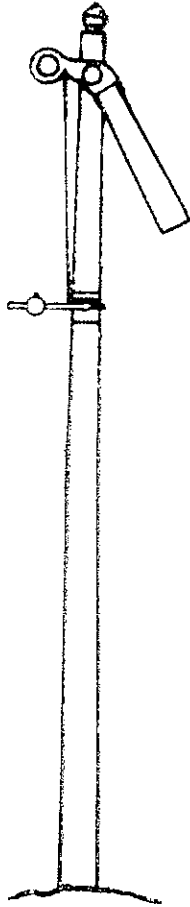
BETWEEN

**STILLINGS JUNCTION and BEVERLY.**

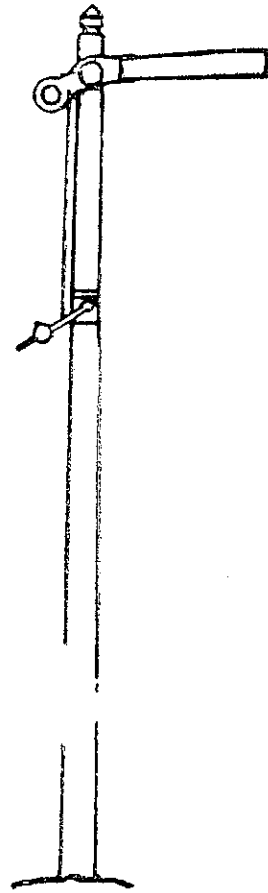


STAFF CRANE.

*Safety.*



*Danger.*



*Complete Staff.*



*Staff Semaphore Signal Is.*

## ***Operation of the Electric Train Staff System.***

All rights conferred upon scheduled trains as indicated on the time table are of no effect between Stillings Junction and Leavenworth. All trains and engines, in both directions, will be governed exclusively by the electric train staffs between Stillings Junction and Leavenworth.

Special attention is called to the fact that it will therefore be necessary, before proceeding, for all EAST BOUND trains to get a staff at Leavenworth and for all WEST BOUND trains to get one at Stillings Junction.

The Electric Train Staff System will be in operation between Stillings Junction and Leavenworth, as aforesaid, on and after a date to be announced by bulletin notice.

### **DESCRIPTION OF THE STAFF SYSTEM.**

The staff is a steel pipe twenty-two inches in length, encircled with brass rings, the end of which is stamped with the name of the two points which bound the limits of its block (Leavenworth and Stillings Junction).

This staff performs two duties. Firstly, it is a key to unlock the levers which operate the semaphore blades, so as to permit the semaphore signals to be set to an inclined (or safety) position for trains to proceed. These signals cannot be set to the safety position without first being unlocked by the train staff. Secondly, it takes the place of, and has the same effect as, a written order, as the possession of a train staff by the engineman gives to him the absolute right of track through the block over all trains.

Only one staff can be taken from the instrument at one time. When the staff has been withdrawn from one instrument, another cannot be withdrawn from either until the staff previously removed has been placed in the same instrument, or in the instrument at the opposite end of that block.

The block extends from Leavenworth to Stillings Junction.

When a train is ready to proceed east, the operator at Leavenworth will signal the operator at Stillings Junction by pressing down twice the bell lever on right side of staff instrument. The operator at Stillings Junction will acknowledge this call by pressing down twice the bell lever on his (corresponding) side. The operator at Leavenworth will then press the bell lever three times and immediately turn the right hand indicator to the position "For Staff." The operator at Stillings Junction, on hearing the three taps, will immediately press down his bell lever and hold it in this position until the needle of the indicator ceases to vibrate, which will be evidence to him that the staff is out. He must then turn his left hand indicator to the position "West Staff Out." When the staff has been released from the machine, the operator at Leavenworth must turn his left hand indicator to the position "West Staff Out." The staff must then be inserted in the lock of the signal and turned in direction of arrow; this releases the levers of the signal governing the track to be used, and permits the signal to be turned to the safety position. When the signal has been set at safety, the staff must be sharply turned back and withdrawn from the lock, and the staff must then be placed in the crane or delivered to the train desiring to proceed.

In all cases except that of trains taking the side-track at Stillings Junction, the staffs will be placed in the staff cranes for delivery, and the **engineman** will see the staff taken from the crane, and it must be delivered by him on arrival at the end of the block to the operator, who, assuring himself that the entire train which delivered it is out of the block, will place it in the machine signal. Leavenworth that the train is out of the block.

For movements in the opposite direction the process should be reversed.

The operator on duty at Stillings Junction shall be chief staff operator, and have control of the staff. He must keep himself informed in regard to the position of trains, and be prepared to give important trains the preference.

In case of failure of the staff apparatus, trains may run between Leavenworth and Stillings Junction without a staff, but before doing so, must have an understanding with the staff operator on duty, and proceed under such control as to avert the possibility of collision and, if necessary to secure perfect safety, will protect themselves by flag.

When the staff apparatus is repaired and again ready for operation, the first train thereafter going through the block with staff must be instructed by the operator, in writing, to proceed carefully, as it is liable to meet a train in the opposite direction, on account of the staff apparatus having been out of working order.

## ***Code of Bell Signals for Electric Train Staff.***

To attract attention—two taps, thus:

Unlock my machine—three taps, thus:

Wait, cannot unlock now—four taps,

thus:

Train has passed into the block—two

taps, two taps, two taps, thus:

Train has passed out of the block—two

taps, two taps, two taps, one tap,

thus:

Testing staff bell—eight taps, thus: - - - - -

### **GENERAL RULES.**

Semaphore signals in connection with the operation of the staff system must always be kept at DANGER, except when necessary to change to SAFETY, to permit trains or engines to proceed. For trains or engines to proceed, the signal must be in the SAFETY position, and, in addition to the signal to proceed, no train or light engine must be permitted to leave a staff station without being in possession of the staff. All trains must approach a staff station under control, prepared to stop if the signal be against them.

On arrival at the opposite end of the block, the engineman must promptly deliver the staff to the signal operator in charge, but the signal operator must never put the staff thus received into the machine until he knows that the last car of the train has passed the signal, or is clear of the block station. In case a train parts, or it is necessary to double, the train staff must be retained by the engineman until all of the train is clear of the block.

Under no circumstances will a staff be transferred from one train to another. It must be delivered to the operator.



East bound trains of the K. C., St. J. & C. B. and C. G. W. railways will signal their approach to the staff operator at Leavenworth by alarm bell from Fifth street.

In all cases the semaphore signal must be thrown to the danger position when the rear car of the train (or the engine, if it be a light engine) has passed the signal; and when the rear car of the train (or the engine, if it be a light engine) has passed 150 feet into the block, the operator will **immediately** signal the staff station in advance that the train has passed into the block.

Enginemen who receive a regular staff will understand that all trains are clear of the block.

When two or more engines are coupled together, the engineman of the leading engine must carry the train staff, but the engineman of the other engine or engines must know that the designated engineman has the staff before proceeding.

**S. E. CRANCE,**

Genl. Supt., K. C., St. J. & C. B. R. R.

**TRACY LYON,**

Genl. Supt., C. G. W. Ry.

**A. J. HITT,**

Genl. Supt., C., R. I. & P. Ry.

***Operation of the Electric Train  
Staff System between Stillings  
Junction and Beverly.  
(C. R. I. & P. Ry.)***

The foregoing rules, governing the operation of the staff system between Leavenworth and Stillings Junction, except as to movement of trains during failure of the staff apparatus, will also, and simultaneously, be in effect in the staff block between Stillings Junction and Beverly, and all employees affected will govern themselves accordingly.

***Rules Governing Train Movement  
between Beverly and Stillings  
Junction on Failure of  
Staff Apparatus.***

1. In case of failure of the staff apparatus, trains will be moved over the block between Beverly and Stillings Junction by the train dispatcher, who, before issuing any train orders over this territory, will ascertain beyond the possibility of a doubt, that the block is entirely clear, and that all the staffs at both ends of the block (28 in number) are in the staff machines.

2. When an order is to be transmitted for movement of trains over this block, the signal, "Staff 31," meaning Staff Telegraphic Train order, will be given to the staff offices at Beverly and Stillings Junction, followed by the word "copy," and the figures indicating the number of copies to be made, and all the requirements of a 31 order, as per General Rules 508 and 509, Book of Rules and Regulations, Operating Department, C., R. I. & P. R'y, will apply to a "Staff 31" order.

3. The operator at the point to which a train has been authorized to proceed on a "Staff 31" order, will permit no other train to enter the block over which the train is approaching until he has received from the engineman and conductor of the authorized train their respective copies of the authorizing order.

4. When the staff apparatus is repaired and ready for operation, the train dispatcher, after he has ascertained positively that the last train moved by a "Staff 31" order has arrived at the staff station to which it was authorized to proceed, will then direct the staff operators at both stations that trains may proceed in accordance with the staff rules.

5. All "Staff 31" orders that have been issued must be promptly sent to the division superintendent at Trenton.

The passing track of the C., R. I. & P. Ry at Stillings Junction will be used only by east bound C., R. I. & P. or C. G. W. trains meeting west bound C., R. I. & P. or C. G. W. trains at that point. The east switch of this track can be opened only by the staff, and is protected by an interlocking derail which is closed only when the switch is open.

A. J. HITT,  
General Superintendent.

W. M. HOBBS,  
Supt. Lines East of Mo. River.

APPROVED:



First Vice-Prest. and Gen'l Manager.

A 145.

# CHICAGO, ROCK ISLAND & PACIFIC RAILWAY.

TELEGRAPHIC TRAIN ORDER No.

Chief Dispatcher's Office

190

STAFF  
31

To C. & E.

at

X. O. K. at

M.

Operator.

Electric train staff apparatus having failed between  
 Beverly and Stillings Junction, train .....  
 after arrival of train ..... at .....  
 is authorized to proceed from .....  
 to ..... with right of track over all  
 other trains, and will report arrival promptly.

Conductors and enginemen, immediately upon arrival at the  
 station to which they have been authorized to proceed, must sur-  
 render this order to the operator in charge of the staff station.

Conductor and Engineman must each have a copy of this order.

Order No. .... O. K. at ..... M. .... Operator.

Conductor.	Train No.	Complete.	At	Dispatcher.	Operator.