# THE REAL MAN

By FRANCIS LYNDE

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CHAPTER XV-Continued.

Smith was jabbing his paper knife absently into the desk blotter. "And him, Billy; no, there's nothing personal yet we go on calling this a civilized about it; but when a great corporation country!" he said meditatively. Then with a sudden change of front: "I'm in this fight to stay until I win out or die out, Billy; you know that. As I have said, Miss Verda can kill me off If she chooses to; but she won't choose to. Now let's get to work. It's pretty late to rout a justice of the peace out of bed to issue a warrant for us, but we'll do it. Then we'll go after Lanterby and make him turn state's evidence. Come on; let's get busy."

But Starbuck, reaching softly for a chair-righting handhold upon Smith's desk, made no reply. Instead he snapped his lithe body out of the chair and launched it in a sudden tiger spring at the door. To Smith's astonishment, the door, which should have been latched, came in at Starbuck's wrenching jerk of the knob, bringing with it, hatless, and with the breath startled out of him, the new stenographer, Shaw.

"There's your state's evidence," said Starbuck grimly, pushing the halfdezed door listener into a chair. "Just put the auger a couple of inches into this fellow and see what you can find."

Richard Shaw had an exceedingly bad quarter of an hour when Smith and Starbuck applied the thumbscrews to force a confession out of him. Nevertheless, knowing the dangerous ground upon which he stood, he evaded and shuffled and prevaricated under the charges and questionings until it became apparent that nothing short of bribery or physical torture would get the truth out of him. Smith was not willing to offer the bribe, and since the literal thumbscrews were out of the question, Shaw was locked into one of the vacant rooms across the corridor until his captors could determine what was to be done with him.

"That is one time when I fired and missed the whole side of the barn," Starbuck admitted, when Shaw had been remanded to the makeshift cell across the hall. "I know that fellow is on Stanton's pay roll; and it's reasonably certain that he got his job with you so that he could keep cases on you. But we can't prove anything that we say, so long as he refuses to talk."

"No," Smith agreed. "I can discharge him, and that's about all that can be done with him."

"He is a pretty smooth article," said Starbuck reflectively. "He used to be a clerk in Maxwell's railroad office, and he was mixed up in some kind of crookedness, I on't remember just

Smith caught quickly at the sugges-

"Wait a minute, Billy," he broke in ; and then: "There's no doubt in your mind that he's a spy?"

"Sure he is," was the prompt rejoinder.

"I was just thinking-he has heard what was said here tonight-which is enough to give Stanton a pretty good chance to outfigure our outfit again." "Right you are."

"In which case it would be little short of idiotic in us to turn him loose



"Are They Sure-Enough Chasing You

We've got to hold him, proof or no Where would we be apt to catch Maxwell at this time of night?" "At home and in bed, I reckon."

"Call him upon the phone and state the case briefly. Tell him if he has any nip on Shaw that would warrant us in turning him over to the sheriff, we'd like to know it."

"You're getting the range now," laughed the ex-cowman, and instead of using the desk set, he went to shut himself into the sound-proof telephone

When he emerged a few minutes Dick gave me the facts. Shaw's a road didn't prosecute. Dick says for

like the Escalante Land company gets down to plain anarchy and dynamiting. it's time to make somebody sweat for it. Let's go and get Shaw."

Together they went across the corri dor, and Smith unlocked the door of the disused room. The light switch was on the door-jamb and Starbuck found and pressed the button. The single incandescent bulb hanging from the ceiling sprang alive-and showed the two men at the door an empty room and an open window. The bird had flown.

Starbuck was grinning again when he went to look out of the window. The roof of the adjoining building was only a few feet below the sill level, and there was a convenient fire escape ladder leading to the ground.

"It's us for that roadhouse out on the Topaz trail before the news gets around to Stanton and Lanterby," he said definitely; and they lost no time in securing an auto for the dash,

But that, too, proved to be a flasco. When they reached Barton's all-night place on the hill road, the bar was still open and a card game was running in an upstairs room. Starbuck did the necessary cross-questioning of the dog-faced bartender.

"You know me, Pug, and what I can do to you if I have to. We want Hank Lanterby. Pitch out and show us

The barkeeper threw up one hand as if he were warding off a blow. "You c'd have him in a holy minute, for all o' me, Billy; you sure could,"

he protested. "But he's gone." "On the level?" snapped Starbuck. "That's straight; I wouldn't lie to you, Billy. Telephone call came from town a little spell ago, and I got Hank outa bed t' answer it. He borra'd Barton's mare an' faded inside of a pair o' minutes."

"Which way?" demanded the ques-"T" the hills; leastways he ain't

headin' f'r town when he breaks from here.'

Starbuck turned to Smith with a wry

"Shaw beat us to it and he scores on us," he said. "We may as well hike back, 'phone Williams to keep his eye on things up at the dam, and go to bed. There'll be nothing more doing tonight."

## CHAPTER XVI.

With all things moving favorably for Timanyoni High Line up to the night of flascos, the battle for the great water-right seemed to take a sudden slant against the local promoters, after the failure to cripple Stanton by the attempt to suppress two of his subordinates. Early the next day there were panicky rumors in the air, none of them traceable to any definite starting point.

One of the stories was to the effect that the Timanyoni dam had faulty foundations and that the haste in building had added to its insecurity. On the heels of this came clamorous court petitions from ranch owners below the dam site, setting forth the flood dangers to which they were exposed and praying for an injunction to stop the work.

That this was a new move on Stanton's part, neither Smith nor Stillings questioned for a moment; but they no sooner got the nervous ranchmen pacified by giving an indemnity bond for any damage that might be done, than other rumors sprang up. For one day and yet another Smith fought mechanically, developing the machinelike doggedness of the soldier who sees the battle going irresistibly against him and still smites on in sheer desperation. He saw the carefully built organization structure, reared by his own efforts upon the foundation laid by Colonel Baldwin and his ranchman associates, falling to pieces. In spite of all he could do, there was a panic of stock-selling; the city council, alarmed by the persistent story of the unsafety of the dam, was threatening to cancel the lighting contract with Timanyoni High Line; and Kinzle, though he was doing nothing openly, had caused the word to be passed far and wide among the Timanyoni stockholders, disaster could be averted now only by prompt action and the swift effacement of their rule-or-ruin secretary and treasurer.

"They're after you, John," was the way the colonel put it at the close of the second day of back-slippings. "They say you're fiddlin' while Rome's aburnin'. Maybe you know what they mean by that; I don't."

Smith did know. During the two days of stress Miss Verda had been very exacting. There had been another night at the theater and much timelater he was grinning exultantly. "That killing after meals in the parlors of the was sure a smooth one of yours, John. Hophra house. Worse still, there had been a daylight auto trip about town thief; but he has a sick sister on his and up to the dam. The victim was hands-or said he had-and the rail- writhing miserably under the pricepaying, but there seemed to be no help us to jug him tonight and tomorrow for it. Since the night of Verda Richmorning he'll swear out the necessary lander's arrival in Brewster, he had not seen Corona; he was telling himself show-down, we'll all fight for you, and nees falling of"

"Good. We'll do that first; and then | that he had forfelted the right to see we'll go after this fellow Lanterby. I her. Out of the chaotic wreck of want to get Stanton where I can pinch things but one driving motive had surthings just a little too fast, and they've vived, and it had grown to the stature of an obsession: the determination to wring victory out of defeat for Timanvont High Line; to fall, if he must fall, fighting to the last gasp and with his face to the enemy.

"I know," he said, replying, after the reflective pause, to the charge passed on by Colonel Dexter. "There is a friend of mine here from the East, and I have been obliged to show her some attention, so they say I am neglecting my job. They are also talking it around that I am your Jonah, and saying that your only hope is to pitch me overboard."

"That's Dave Kinzie," growled the Missourian. "He seems to have it in for you, some way."

"Nevertheless, he was right," Smith returned gloomlly. Then: "I am about at the end of my rope, colonel—the rope I warned you about when you brought me here and put me into the hang on until my job's done. When it is done, when Timanyoni High Line can stand fairly on its own feet and fight its own battles, I'm gone."

"Oh, no, you're not," denied the ranchman-president in generous protest. "You come on out home with me tonight and get away from this muddle for a few minutes. It'll do you a heap of good; you know it always does." Smith shook his head reluctantly but

firmly. "Never again, colonel. It can only be a matter of a few days now, and I'm not going to pull you and your wife and daughter into the limelight if I can

help it." Colonel Dexter got out of his chair and walked to the office window. When he came back it was to say: "Are they sure-enough chasing you, John?-for

something that you have done? Is that what you're trying to tell me?" "That is it-and they are nearly here. Now you know at least one of the reasons why I can't go with you tonight." "I'll be shot if I do!" stormed the

generous one. "I promised the missus I'd bring you." "You must make my excuses to her;

once more carrying a gun. She will understand." told the rest of us. That brings on him. more talk, John. I haven't said a word before, have I?

wide world, John."

Smith stood up and put his hands behind him, facing the older man

"Colonel, I'd give ten years of my life, this minute, if I might go with you to Hillcrest this evening and tell Corona what I have been wanting to tell her ever since I have come to know what her love might make of me. The fact that I can't do it is the bitterest thing I have ever had to face, or can ever be made to face."

Colonel Baldwin fell back into his swing-chair and thrust his hands into his pockets.

"It beats the Dutch how things tangle themselves up for us poor mortals every little so-while," he commented, after a frowning pause. And then: "You haven't said anything like that to Corry, have you?"

"That was white, anyway. And now I suppose the other woman—this Miss Rich-something-or-other over at the hotel-has come and dug you up and got you on the end of her trailing rope. That's the way it goes when a man mixes and mingles too much. You never can tell-"

"Hold on," Smith interposed. "Whatever else I may be, I'm not that kind of a scoundrel. I don't owe Miss Richlander anything that I can't pay without doing injustice to the woman I love. But in another way I am a scoundrel, colonel. For the past two days I have been contemptible enough to play upon a woman's vanity merely for the sake of keeping her from talking too much."

The grizzled old ranchman shook his

head sorrowfully. "I didn't think that of you, John; I sure didn't. Why, that's what you might call a low-down, tin-horn sort of a game."

"It is just that, and I know it as well as you do. But it's the price I have to pay for my few days of grace. Miss Richlander knows the Stantons; they've made it their business to get acquainted with her. One word from her to Crawford Stanton, and a wire from him to my home town in the middle West would settle me."

The older man straightened himself in his chair, and his steel-gray eyes blazed suddenly.

"Break away from 'em, John!" he urged. "Break it off short, and let 'em all do their worst! Away along at the first, Williams and I both said you wasn't a crooked crook, and I'm believing it yet. When it comes to the

they'll have to bring a Servick along if they, want to match you out of the Timanyoni. You go over yonder to the Hophra House and tell that young woman that the bridle's off, and she can talk all she wants to!"

"No," said Smith shortly. "I know what I am doing, and I shall go on as I have begun. It's the only way. Matters are desperate enough with us now, and if I should drop out-

The telephone bell was ringing, and Baldwin twisted his chair to bring himself within reach of the desk set. The message was a brief one, and at its finish the ranchman-president was frowning heavily.

"By Jupiter! It does seem as if the bad luck all comes in a bunch!" he protested. "Williams was rushing lost a whole section of the dam by stripping the forms before the concrete was set. That puts us back another twenty-four hours, at least. Don't that beat the mischief?"

Smith reached for his hat. "It's six o'clock," he said; "and Williams' formstrippers have furnished one more reason why I shouldn't keep Miss Richlander waiting for her dinner." And with that he cut the talk short and went his way.

With a blank evening before her, Miss Richlander, making the tete-atete dinner count for what it would, tightened her hold upon the one man available, demanding excitement. Nothing else offering, she suggested an evening auto drive, and Smith dutifully telephoned Maxwell, the railroad superintendent, and borrowed a runabout.

Smith drove the borrowed runabout in sober silence, and the glorious beauty in the seat beside him did not saddle; and I'm trying desperately to try to make him talk. Perhaps she, too, was busy with thoughts of her own,



"There is a Limit, Verda."

At all events, when Smith had helped her out of the car at the hotel entrance and to Corona you may say that I am and had seen her as far as the elevator, she thanked him half absently and took his excuse, that he must return "Which means, I take it, that you've the runabout to Maxwell's garage, withbeen telling Corry more than you've out laying any further commands upon

Just as he was turning away, a bellboy came across from the clerk's desk with a telegram for Miss Richlander. "Well, I'm going to say it now: I've Smith had no excuse for lingering, but the tipping of the boy answer for a momentary stop-gap. Miss Verda tore the envelope open and read the inclosure with a fine-lined little frown coming and going between her eyes.

"It's from Tucker Jibbey," she said, glancing up at Smith. "Someone has told him where we are, and he is following us. He says he'll be here on the evening train. Will you meet him and tell him I've gone to bed?"

At the mention of Jibbey, the moneyspoiled son of the man who stood next to Josiah Richlander in the credit ratings, and Lawrenceville's best imitation of a flaneur, Smith's first emotion was one of relief at the thought that Jibbey would at least divide time with him in the entertainment of the bored beauty; then he remembered that Jibbey had once considered him a rival, and that the sham "rounder's" presence in Brewster would constitute a menace more threatening than all the others put together. "I can't meet Tucker," he said blunt-

"You know very well I can't." "That's so," was the quiet reply. "Of course you can't. What will you do when he comes?—run away?"

"No; I can't do that, either. I shall keep out of his way, if I can. If he finds me and makes any bad breaks, he'll get what's coming to him. If he's worth anything to you, you'll put him on the stage in the morning and send him up into the mountains to join your

"The idea!" she laughed. "He's not coming out here to see father. Poor Tucker! If he could only know what he is in for!" Then: "It is beginning to look as if you might have to go still deeper in debt to me, Montague. There is one more thing I'd like to do before I leave Brewster. If I'll promise to keep Tucker away from you, will you drive me out to the Baldwins' tomorrow afternoon? I want to see the colonel's fine horses, and he has invited me, you know." Smith's eyes darkened.

"There is a limit, Verda, and you've reached it," he said quickly. "If the colonel invited you to Hillcrest, it was because you didn't leave him any chance not to. I resign in favor of Jibbey," and with that he handed her into the waiting elevator and said, "Good-

night." (TO BE CONTINUED.)

Anticipating a Slump.

The Victim-"And why should you be so much concerned even if I am losing my hair?" The Barber-"Why, sir, anyone is annoyed to find his busi-

Construction Is Usually Divided Into Two Entire Distinct Classes.

# SUBGRADE FOR THE SURFACE

Some of Most Important Details Requiring Careful Attention Are Frequently Overlooked - Some Precautions to Observe.

(Prepared by the United States Depart-ment of Agriculture.)

Figure 1 shows a typical cross section for a gravel-road surface and indicates the customary steps involved in the construction of such a surface. The limiting thicknesses shown on this cross section are by no means followed universally, but are believed to represent the best current practice. The minimum thickness shown is supposed to be employed where the traffic is light and the subgrade is uniformly stable, while the maximum thickness is adapted for opposite conditions. Perhaps the most usual compacted thickness of surface is eight inches at the center and six inches at the edges. The difference in thickness between the edges and center is effected by making the crown of the subgrade flatter than that of the surface.

The construction of a gravel road usually is divided into two entirely distinct classes of work. The work of grading and preparing the subgrade falls into one class, and that of hauling, spreading and compacting the gravel into the other. The first class of work has been discussed at considerable length in connection with earth and sand-clay roads, but since it is desired to emphasize certain features of subgrade preparation that are of increased importance in connection with gravel-road construction, both classes of work will be considered in the following discussion:

Preparation of the Subgrade. In grading the roadbed and preparing the subgrade for a gravel surface, it should be borne in mind also that the more expensive a road surface, the greater should be the care exercised to prevent it from being damaged i

loads are dumped all in one spot and spread later with shovels, as is done frequently, it is very difficult to secure uniform density of the surface crust by subsequent harrowing and rolling. The spots where the loads are dumped nearly always will be more densely compacted than the areas between, and, as a result, uneven settlement will develop soon.

2. The gravel should be spread in two or more courses, and the thickness of the different courses should be approximately the same, except that the first course may be made somewhat thicker than the succeeding courses, because, in general, a thicker layer of gravel may be compacted on the subgrade than when spread over a layer of gravel already compacted. It usually is impracticable to have the compacted thickness of any course greater than about 5 inches, and quite frequently 3 or 4 inches is as much as can be compacted satisfactorily at one

3. After each course of gravel is spread it should be harrowed with a tooth harrow until the various sizes of particles and the binder or cementing material are distributed thoroughly through the mass. Then it should be compacted by rolling with a power roller weighing about 10 tons, or by means of traffic. Where a roller is employed the rolling should be continued until the particles of gravel are all well bonded together and the surface presents a smooth, uniform appearance. When completed, the surface of each course should be so firm and unyielding that it will not be disturbed in any way by subsequent traffic.

4. Where it is necessary to add sand or clay to the gravel in order to fill the voids, it should be done after each course is spread and before it is harrowed, except that with some kinds of gravel it may be permissible to add a limited amount of fine material to the surface of the top course after the harrowing is completed and the rolling is in progress.

5. Where the binder consists of some material other than clay, it may be desirable to sprinkle each course with water while it is being rolled, and even where clay is used as a binder a small amount of sprinkling may be necessary in dry weather in order to secure a satisfactory bond. The sprinkling always should be done uniformly and in such quantities as not to wash the fine material out from the gravel or to soften the subgrade. 6. When the road surface is com-

6 to 10 inch Gross section ready to receive the surfacing mate 3 to 5 inc A to IZ inches Cross section of completed road. TYPICAL CROSS SECTIONS SHOWING METHOU OF CONSTRUCTING A GRAVEL ROAD "W"should be at least 10 feet for single track roadway and "S" generally not less than 5 feet, for double track, "W"should be not less than 1 feet and "S" not less than 3 feet.
"H" crown, varies from \$\frac{1}{2}\$ inch per foot for level grade, to I inch per foot for a grade of 5%.

subgrade, and the greater should be the accuracy with which the subgrade is constructed, so that no unnecessary surfacing material may be required to correct irregularities in grade and cross section. No matter what the soil conditions may be, the subgrade for a gravel road surface, when completed, should conform closely in grade and cross section with the requirements of the plans and should present an even, uniform appearance. Also, it should be as firm and unyielding as the conditions will permit.

Some of the most important details requiring careful attention in preparing the subgrade, and which are perhaps most frequently overlooked, are (1) backfilling culvert trenches so as to prevent subsequent settlement (2) exclusion of vegetable matter from fills, (3) provision for draining wetweather springs which occur in the subgrade, and (4) the matter of thoroughly loosening and distributing the materials contained in old road crusts. After the roadbed has been graded

and drained properly, and the details mentioned above have received proper attention, the work of preparing the subgrade consists simply in forming a trench, as shown in figure 1, to receive the gravel surface. The trench may be formed largely with a grading machine, but the final shaping should be effected by means of picks and shovels and rolling. It is customary to provide grade stakes at intervals of about 50 feet, to serve as a guide for the pick and shovel work, and where extreme accuracy is desired cords may be stretched between the stakes to insure that the subgrade conforms to the required grade throughout. The rolling is done ordinarily with a power roller weighing about ten tons.

In order that the subgrade may be well drained during the process of spreading and compacting the gravel it is frequently necessary to provide shoulder drains at comparatively short intervals. Such drains are constructed by opening small ditches through the shoulders and partially filling them with gravel.

The Gravel Surface. The principal precautions to observe

in constructing a gravel road surface, after the subgrade is prepared, may be commented upon briefly as follows:

1. The gravel should be delivered on the work in wagons or cars especially adapted for spreading each load uniformly over that part of the sub-

through settlement or upheaval of the | plete it should be uniform in grade and cross section. If depressions occur under the roller they should be corrected by adding gravel and continuing the rolling, and this should be kept up until no depressions or appreciable waves are produced by the roller in moving back and forth over the surface.

7. After the road is opened to traffic it should be watched very carefully for several months and all defects which develop should be corrected immediately. The work of maintaining the road until the surface no longer "picks up" or ravels under traffic should be considered an essential feature of the construction. When traffic is depended upon to compact the gravel, much dragging usually is necessary in order to secure a smooth, wellbonded surface. In fact, the cost of dragging, under such conditions, frequently may exceed the cost of securing a well-bonded surface by means of rolling.

The construction method described above is modified quite frequently by omitting the subgrade trench and the rolling. The practice followed in many localities is simply to grade up the roadbed and heap gravel along the central portion. Traffic is then depended upon to spread and compact the gravel and produce a uniform surface. While some of the roads constructed in this way are great improvements over the original earth roads they are nearly always crowned too much for comfortable driving, and seldom wear as well as when the more careful method of construction is followed. It is believed, therefore, that in the long run it usually pays to employ a trenched subgrade and to compact the surface by rolling, though a possible exception to the economy of a trenched subgrade may exist where good gravel may be obtained very cheap. In this case it may be cheaper to surface the entire roadway than to incur the additional expense of trenching and constructing earth shoulders.

## TO DESTROY SHEEP SORREL

Weed Cannot Be Entirely Exterminat ed by Mowing, But It Can Be Weakened to Great Extent.

Sheep sorrel cannot be entirely exterminated by mowing, but it can be greatly weakened. The weed should be mown as soon as the flowering stalks have attained full size, but begrade for which it is intended. Where fore they have commenced to turn red.