#### Solomon's Stables—Cont'd

whose dealings extended into the neighboring kingdoms about Palestine. Not least of his activities were his enterprises as a horse dealer. His close connection with the Egyptian court gave him inside opportunities for securing the finest breeds of Egyptian horses."

Dr. Breasted went on to quote from the Old Testament, the passages which indicate that the stables uncovered at Megiddo are really those of Solomon. "And the horses which Solomon had were brought out of Egypt; and 'the king's merchants received them in droves, each drove at a price. And a chariot came up and went out of Egypt for six hundred shekels (10 pounds) of silver, and a horse for a hundred and fifty (2½ pounds);

and so for all the kings of the Hit-

tites, and for the kings of Syria, did

they bring them out by their means (I Kings X, 28-29).
"Solomon's record also states," said Dr. Breasted, "that he bestowed those horses in the chariot cities and with the kings at Jerusalem. We are told in the old Testament record that one of these chariot cities was Megiddo, and Megiddo is the Hebrew name for the great fortified city which was later known as Armageddon."

The excavating party, according to Dr. Guy, is now investigating a layer in the mound which was covered about 3,000 years ago, at just about the time of Solomon. Besides the interesting discovery of the stables, the clearing of Armageddon is disclosing a coherent, well laid out town, with streets and connected buildings. The Jerusalem of Solomon's time has, of course, completely disappeared and this is the first attempt at restoration of a town plan of his age.

Science News-Letter, September 8, 1928

## Films for Color—Cont'd

some years, while similar film has been made for use in movie cameras. However, it has never been obtainable before for roll film cameras, which are most commonly used. The film is not very much more expensive than the ordinary kind, however, since a six exposure film in the 3a, or  $3\frac{1}{4}$ " by  $5\frac{1}{2}$ ", size costs 75 cents. As the films are sensitive to red light, they cannot be developed with the ordinary red dark room lamp. manufacturers, however, will develop them. They charge 25 cents for developing the 3a size.

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## Multum in Parvo

GARY N. CALKINS, in Biology of the Protozoa (Lea and Feabiger):

In the lower Metazoa the organ systems are less highly specialized; fewer organs are present to perform the same fundamental vital activities and the tissue cells have relatively more kinds of work to do for the organism as a whole. Thus the supporting and covering cells of a cœlenterate combine the functions of respiration, irritability, muscular contraction, excretion and circulation with the primary functions of an epithelium. Each of them is more nearly balanced physiologically than a single cell of the higher types, but it still needs the activities of other cells, and the organism is again the sum-total of all its cellular parts.

In the protozoon, finally, we find a cell which is physiologically balanced; it is still a cell and at the same time a complete organism performing all of the fundamental vital activities within the confines of that single cell. Whitman, in his essay on "The Inadequacy of the Cell Theory" clearly expressed the inconsistencies in the common use of the designation "cell" for this variety of structure.

As organisms the Protozoa are more significant than as cells. In the same way that organisms of the metazoan grade are more and more highly specialized as we ascend the scale of animal forms, so in the Protozoa we find intracellular specializations which lead to structural complexities difficult to harmonize with the ordinary conceptions of a cell. In perhaps the majority of the Protozoa the fundamental vital activities are performed, as in the simpler Amœbæ or simple flagellates, by the protoplasm as a whole and without other visible specializations than nucleus and cell body. In other forms, however, intracellular differentiations lead to intracellular division of labor which in some types becomes as complicated as are many of the organisms belonging to the Metazoa. Thus Diplodinium ecaudatum, one of the Infusoria, according to Sharp, has intracellular differentiations of extraordinary complexity. Bars of denser chitinous substance form an internal skeleton; special retractile fibers draw in a protrusible proboscis; similar fibers closing a dorsal and a ventral operculum; other fibrils, functioning as do nerves of Metazoa, form a complicated coöordinating system.

Science News-Letter, September 8, 1928

### Parasite Students—Cont'd

fell below the campus average in intelligence, and the majority belonged to the psychological type known as extroverts; that is, good social mixers and more inclined to activity than to thinking.

"Contrasted with the student body, the cribber becomes a psychological

type," Mr. Brownell concludes.
"His low intelligence may make cheating somewhat of a necessity. His extroversion may operate to further this. His emotional instability may make it easier for the spirit to succumb under the twofold necessity.'

More than half the college cheating could be eliminated if this psychological type were eliminated. With the general type would go most of the "all-round" college men who shine in team and track contests, glee clubs, dramatic productions and other bookless college activities.

Science News-Letter, September 8, 1928

#### Cold for Oats—Cont'd

the early seedling stage as when it was persisted in to maturity. According to its specific nature, a plant would ripen its seeds early under the stimulus of lengthened or shortened daylight hours, even though that stimulus had been applied weeks before the ripening period and then withdrawn.

Plants are not concerned primarily with the whole of the white daylight when they respond to artificial darkening, Prof. Maximow discovered. He tried cutting off parts of the light supply, and found that when red and vellow light was withdrawn the plants acted as though they were in the dark, so far as their response to the length of day was concerned.

Science News-Letter, September 8, 1928

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A normal three-weeks-old baby can hang by its hands longer than the average adult.

The oldest Latin writing is four words engraved on a gold pin of about 550 B. C.

For the first time, explorers have climbed Mount Sorata, in Bolivia, 21,500 feet high, and have made a careful map of the mountain.