With the aid of super-illumination much in excess of the usual studio requirement, the photographer now takes two films of the same scene simultaneously through a single lens. One of these responds only to green light, and is finished as a green transparency. The second, recording only red, is finished in red. The two films, pasted back to back in exact register, are ready for the exhibitor. There is no photographic deposit of metallic silver as in the case of the ordinary black and white picture.

Artists, accustomed to a whole galaxy of pigments, can hardly believe that red and green alone can yield such accuracy and variety in shade. Sky tints; anything you wish in leaf, tree-trunk or earth shades; every possible hair and flesh tint, and even the regal effects of warm black plush and golden satin are faithfully and beautifully recorded. Pure lemon yellow, cobalt blue and the pure purple shades are not available, however - at least not until some three-color process is perfected. Unfortunately there are only two sides of a film, so that the third color doesn't knowwhere to go. These shortcomings, nevertheless, are not noticed by the cinema patron, who spends most of his time appraising the flesh tints anyway!

The color of film costs several times the figure for black and white. However, when even the cheapest comedies cost five dollars per second/of theater exhibition time, or in other words five dollars per foot of film, the added expense does not rate high when compared to other costs. Unlike the hand-tinted films of previous years, the new films may be duplicated in positive indefinitely without continued repetition of the great initial cost.

## ARABIA MAY BE MOTHER OF FIRST CIVILIZATION

Arab faces in the tented town of Jabrin, an oasis in southern Arabia, which have a fleeting resemblance to features on prehistoric sculpture in Mesopotamia, may be a clue to the birthplace of civilization.

O.G.S. Grawford of the British Ordnance Survey, in the forthcoming issue of the Geographical Review, pieces the story of civilization on earth which is told by fragments of art and industry of the ancient races of Mesopotamia, India, and Egypt.

Remains of the oldest civilized race known, the Sumerians, were found in Mesopotamia a year ago. A contemporary inscription of a king who had been thought to be only mythical, and a masterpiece of art, consisting of a carved frieze of cattle being milked, were among the discoveries. The inscription is now the earliest dated historical document in the world, and is believed to have been made about 3500 years before Christ.

But on the sites where these ancient remains were found, are traces of a still older race which left nothing behind it but painted pottery and arrowheads.

"This race of neolithic people later disappeared," Mr. Crawford explains, "and they did not plant the seeds of an enduring civilization. It seems certain they came to the well watered plains of the Tigris and Euphrates from the north,

where possibly the climate of Persia was getting drier. In these remoteages, nearer perhaps to the Ice Age than we are to these people, increasing dryness, unlike today, would make Mesopotamia more inhabitable than less.

"This uncivilized race was replaced by the Sumerians who brought with them two epoch-making inventions, copper and writing, and also domestic animals, unknown to the earlier inhabitants. But the origin of the Sumerians is shrouded in mystery.

"In what land did they first learn to write, mine copper andmake copper implements and build ships? When they emigrated from their own land and first brought their arts to the valley of the Tigris and the Euphrates, most of Europe was still in the Stone Age."

Their peculiar mode of dress, a short skirt that left most of the body naked, indicated that they did not come from the colder regions of the north, Mr. Crawford believes. That they did not come from India or obtain their civilization from there is shown by relics of races recently unearthed in the valley of the Indus from beneath more recent ruins dating from the third century before Christ. These ruins beneath ruins are remains of brick buildings of the Copper Age. Inscribed seals like those found on early Babylonian sites were unearthed there.

Either the Sumerians came from India or else some of them went to India at the same time that others went to Mesopotamia, Mr. Crawford believes. Both the Indian and Sumerian script were highly conventionalized and developed, and neither seems to have been derived from the other. If the Indian script resembled the earliest pictorial writing of Sumeria, it might have been possible to believe that the Sumerians came fron India.

The Asiatic influence in ancient Egyptian art and industry which has been recognized for a long time, was believed to have come from Mesopotamia, In Egypt, history goes back to about 3500 years before Christ. Before this time there was a long prehistoric civilization, which, according to archeological findings, falls into three more or less distinct periods.

The last period, just before the dawn of history, is characterized by pottery often decorated with ships and in a style which resembles somewhat the early Sumerian. The similarity is more in character than in subject matter. Much other evidence exists showing connections between the Egyptian and Mesopotamian civilizations, such as brick building and cylindrical inscribed seals. A design of a long-legged bird standing on an un-Egyptian ship pecking at a fish appears on two prehistoric Egyptian vases.

"The Sumerians who brought their civilization to the valley of the Tigris and Euphrates, apparently came from the south," Mr. Crawford said, "but not from India. Is it possible to find a common source for both the Sumerians and what has always been thought a direct Mesopotamian influence on Egypt?

"Were the Sumerians driven from some barren region of southern Arabia by a cause similar to that which at an earlier period had driven the people who painted pottery and used arrowheads from the land of the Tigris and the Euphrates? Did some of these Sumerian nomads settle in the valley of the two rivers and others in the valley of the Nile?

"It is quite probable that the Sumerians once inhabited some part of Arabia, and there is hardly any other place from which they could have come. Deserts must have become drier since the Ice Age. A relatively slight decrease in rainfall would be enough to turn habitable grassy plains into desorts and drive the wanderers to the well-watered valleys.

"Such causes may also have operated in Africa. They may have caused the first peopling of Egypt and the gradual driving back of the Stone Age folk along the western margin of Europe. They may have driven the Central Asiatic nomads down to the plains of China.

"There is no new direct evidence of an early Sumerian civilization in southern Arabia, but it is one of the few remaining regions of the world not yet explored," Mr. Crawford continued. "No archeological excavations have been made there, and except for one or two reconnaissances, no European traveller has ever been there.

"It is possible that mounds such as have recently been discovered in India exist there. Major R. E. Cheesman, the latest traveller who has penetrated into southern Arabia, visited Jabrin and made some interesting observations on the Al Murra, a race of people now inhabiting that casis.

"They live entirely in tents; they speak Arabic, but only in addition to their native tongue, and until two years before his visit they were pagans, Major Cheesman said. 'The Al Murra type of face reminds me of the features to be seen on early Sumerian sculptures. It is not unreasonable to suppose that they are the remnants of this, the earliest civilization, left unchanged and unaffected by the passing of nations in the fastnesses of their desert stronghold."

## BRAINS MORE USEFUL THAN BEEF IN SPORTS

The most valuable gift a baseball or football player can have isn't extraordinary strength or endurance or even speed. All of these won't keep him in the spotlight of fame if he lacks brains, according to tests being made by Dr. C. H. Bean, psychologist at the University of Louisiana.

The quality which Red Grange, Illinois football star, regards as most important in his success really comes second, said Dr. Bean. This quality has been described as "the perceiving of motion of several men in terms of a player's own motion, so that he knows where all of them will be when he himself reaches a desired position."

"But intelligence is so important in this," explains Dr. Bean, "that if intelligence is left out, as it can be by mathematical calculation: the mere speed of reaction to a situation is secondary."

Muscular strength and endurance rank third among the factors of success thus far measured, and weight or "beef" is fourth.

All this is true for such sports as football, baseball, and basketball, but when it comes to track and field events intelligence becomes less vital and