as much work, yet must gather straw, and they could hardly work fast without it.

Egyptian bricks were more varied in size than modern building brick. Prof. Petrie cites buildings in Egypt made with huge bricks, 23.6 inches by 12.1. The smallest brick was only seven or eight inches long.

When the Israelites were in Egyptian bondage, the building style favored large bricks, about 15 inches or longer. Prof. Petrie says it would require several men to move one of the largest bricks without breaking the edges, and two men to do the brick laying, all of which adds to our mental picture of Israelites in Egypt.

Science News Letter, July 1, 1939

PHYSIOLOGY

"Panting Hormone" May Aid In Drowning Accidents

A "PANTING" hormone effect that promotes rapid breathing has been discovered by Drs. Theodore Koppanyi and C. R. Linegar of the Georgetown University School of Medicine. Possible human clinical use of this neurohormone is foreseen in cases that need respiratory stimulation, such as gas poisoning or drowning accidents.

Violent panting is produced within 15 seconds after acetylcholine, another hormone now made synthetically, is injected. The neurohormone that produces the quick breathing is poured out into the blood stream when the ends of the nerves are stimulated by this substance.

The Georgetown University scientists believe that the hormone produced is the same or very similar to sympathin, the hormone discovered by Dr. Walter B. Cannon of Harvard. Sympathin stimulates the sympathetic nervous system, raising blood pressure, speeding the heart beat, relaxing the muscles around the lower digestive tract and dilating the pupils of the eyes. The newly found respiratory effect is also a function of the sympathetic nervous system.

After announcing their research in *Science,* Drs. Koppanyi and Linegar plan to work on the extraction of the hormone from the blood in order that it may be used experimentally in further tests.

Science News Letter, July 1, 1939

Rich deposits of tantalum and columbium are reported in the Belgian Congo.

Floods in the United States ordinarily cost about 100 million dollars in damage a year; but the Mississippi River flood of 1927 cost three times that much.

PSYCHOLOGY—SOCIOLOGY

Reform of Prisoners Cannot Take Place Inside Prisons

THAT we should abandon the attempts to reform men in reformatories, but expend the same energy in rehabilitating only those criminals who show some promise of becoming worthwhile citizens, is the proposal of two U. S. Public Health Service officers familiar with prison personalities.

Inside the prison walls it is practically impossible for the prisoner to reform, declare these experts in a new book *Problems in Prison Psychiatry,* by Drs. J. G. Wilson and M. J. Pescor.

Any change in character must come about by the prisoner's own volition and cannot be produced through force. But because discipline in prisons must be maintained, such cooperation between the custodial force and prisoners is practically impossible.

Fraternizing between guards and prisoners is strictly forbidden, and this rule not only prevents cooperation but it promotes enmity, deceit, and bitterness.

Other influences acting to oppose reformation in prison are the rigid regimentation, the written rules that govern every movement of the prisoner for every one of the twenty-four hours, leaving him no chance for initiative, and the absence of women. And, somewhat paradoxically, we must also add the type of coddling which relieves the prisoner of all responsibility and feeds, clothes and cares for his routine as though he were an infant.

These conditions interfere seriously, these experts declare, with a program of rehabilitation. The prison now serves as a means of segregating and punishing dangerous prisoners—for the revenge and protection of the public.

About one-fourth, they estimate, of the men now in prison should remain there indefinitely. They should be made as happy and comfortable as possible under conditions which demand safe custody, but no efforts should be wasted on their reformation.

The other three-fourths can be safely paroled. With them could go at least three-fourths of the prison personnel engaged in their rehabilitation.

Outside the prison walls these groups could work together for rehabilitation with profit to both the prisoner and society.

Science News Letter, July 1, 1939

PSYCHOLOGY

Jazz Enters the Laboratory For Psychological Study

SYNCOPATION is not the new thing that jitterbugs probably believe, and yet scientific understanding of its appeal for dancing humans has never yet been attained.

Know where syncopation got its start? Not in Harlem or Tin Pan Alley or the African jungle; syncopation is a device of the classic Greek poets.

The rhythmic device of superimposing a *one*-two-three rhythm upon a *one*-two-three-four fundamental so that the accented beat of the three-part rhythm fell on the unaccented beats of the four-part rhythm is characteristic of American jazz but did not originate there.

Such good classical compositions as Beethoven's *Symphony in B-flat* and Chopin's *Valse in A-flat, Op.* 42 use exactly this same device. The former makes a passage in common time sound as if it were in triple. The Chopin piece achieves a syncopic effect by placing a melody in two-part time over an accompaniment in three-part time.

Rhythm is enjoyed only through movement, psychologists seem mostly to agree. The movement may be violent as it is with the jitterbug or the members of a modern swing band. Or it may take place only in the imagination or in tiny movements of an involuntary and unrecognized sort.

Syncopation seems to be enjoyed because the variety in accent is superimposed upon a regularity of rhythm that makes jazz popular for dancing.

Subjecting syncopation to laboratory